

Small Business Regulatory Review Board Meeting

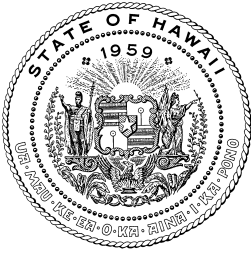
Wednesday, August 15, 2018

10:00 a.m.

No. 1 Capitol District Building

250 South Hotel Street, Honolulu, HI

Conference Room 436



SMALL BUSINESS REGULATORY REVIEW BOARD

Department of Business, Economic Development & Tourism (DBEDT)
No. 1 Capitol District Bldg., 250 South Hotel St. 5th Fl., Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
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David Y. Ige
Governor

Luis P. Salaveria
DBEDT Director

Members

Anthony Borge
Chairperson
Oahu

Robert Cundiff
Vice Chairperson
Oahu

Garth Yamanaka
2nd Vice Chairperson
Hawaii

Harris Nakamoto
Oahu

Nancy Atmospera-Walch
Oahu

Reg Baker
Oahu

Mary Albitz
Maui

William Lydgate
Kauai

Director, DBEDT
Voting Ex Officio

AGENDA

Wednesday, August 15, 2018 ★ 10:00 a.m.
No. 1 Capitol District Building
250 South Hotel Street - Conference Room 436

I. Call to Order

II. Approval of July 18, 2018 Meeting Minutes

III. New Business

- A. Discussion and Action on Proposed New Rules and Regulations for Kauai County Code Section 18-5.3, **Revocable Permits to Vend within County Right-of-Ways**, promulgated by Department of Parks and Recreation / County of Kauai – **Discussion Leader – Will Lydgate**

IV. Old Business

- A. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to Hawaii Administrative Rules (HAR) of Chapter 162, **Food Safety Certification Costs Grant Program**, promulgated by Department of Agriculture (DOA) – **Discussion Leader – Robert Cundiff / Will Lydgate**
- B. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments of HAR Title 4 Chapter 71, **Plant and Non-Domestic Animal Quarantine, Non-Domestic Animal Import Rules**, promulgated by DOA – **Discussion Leader – Robert Cundiff / Will Lydgate**

V. Administrative Matters

- A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, Hawaii Revised Statutes

VI. Next Meeting: Scheduled for Wednesday, September 19, 2018, at 10:00 a.m., Capitol District Building, Conference Room 436, Honolulu, Hawaii

VII. Adjournment

If you require special assistance or auxiliary aid and/or services to participate in the public hearing process (i.e., sign language, interpreter, wheelchair accessibility, or parking designated for the disabled), please call (808) 586-2399 at least three (3) business days prior to the meeting so arrangements can be made.

II. Approval of July 18, 2018 Meeting Minutes

Small Business Regulatory Review Board

MINUTES OF REGULAR MEETING - Draft

July 18, 2018

Conference Room 436 - No. 1 Capitol District Building, Honolulu, Hawaii

- I. **CALL TO ORDER:** Chair Borge called the meeting to order at 10:01 a.m., with a quorum present.

MEMBERS PRESENT:

- Anthony Borge, Chair
- Robert Cundiff, Vice Chair
- Garth Yamanaka, Second Vice Chair
- Harris Nakamoto
- Mary Albitz
- William Lydgate
- Mark Ritchie

ABSENT MEMBERS:

- Nancy Atmospera-Walch
- Reg Baker

STAFF: DBEDT

Dori Palcovich
Ashleigh Garcia

Office of the Attorney General

Jennifer Waihee-Polk

II. **APPROVAL OF JUNE 20, 2018 MINUTES**

Vice Chair Cundiff made a motion to accept the June 20, 2018 minutes, as presented. Ms. Albitz seconded the motion, and the Board members unanimously agreed.

III. **NEW BUSINESS**

- A. Discussion and Action on Proposed Amendments to HAR Title 4 Chapter 86, Petroleum Products Accounting and Inspection, promulgated by Department of Agriculture (DoAg)

Ms. Jeri Kahana, Administrator at DoAg’s Quality Assurance Division, explained these rules represent a repeal of the prior HARs and adoption of a new chapter. With the merging of DoAg’s Measurements Standard Division, the repeal of the chapter allows for updates. The new chapter consists of mostly housekeeping updates; it does not affect small businesses aside from some of the definition changes.

Chapter 86 was originally adopted to include the sale of gasohol, a gasoline blend containing 10 percent alcohol. In 2015, however, the requirement for the blending of ethanol was repealed by the legislature; thus, the clarification in the rules was requested by Hawaiian Energy Services LLC for the flexibility to blend motor fuels between 0 and 10 percent.

Vice Chair Cundiff made a motion to move the proposed rules to public hearing. Mr. Nakamoto seconded the motion, and the Board members unanimously agreed.

IV. OLD BUSINESS

- A. Discussion and Action on the Small Business Statement After Public Hearing of the Proposed Repeal of Hawaii Administrative Rule (HAR) Title 11 Chapter 281, and Adoption of Chapter 280.1 Underground Storage Tanks, promulgated by Department of Health (DOH)

Ms. Noa Klein, Hazardous Waste Program Manager from DOH's Solid & Hazardous Waste Branch, stated the rules had already been signed by the Governor and became effective on July 15. DOH received many comments on the proposed rules, however, none of the comments involved small businesses impact. Small business owners did approach DOH during "informal" public meetings for clarifications, information, and questions.

The portion of the rules that affect small businesses pertains to the requirement that all regular gas station tanks must have second containment within ten years of the effective date of the rules.

Mr. Nakamoto made a motion to support the adoption of the rules. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

- B. Discussion and Action on the Small Business Statement After Public Hearing and the Proposed Amendments to HAR Title 19 Chapter 20.1, Commercial Services at Public Airports, promulgated by Department of Transportation (DOT)

Ms. DreanaLee Kalihi, Revenue Enhancement Manager at DOT's Harbor Division, stated that there has been a series of four public hearings. Minor changes were made to the originally proposed language for clarification purposes; i.e., responsibilities of the permittees (Uber, Lyft, or other TNCs) and the provider of services (drivers). In total, 181 testimonies, both oral and written, were received with 99.9 percent in support of the rules; most of the positive testimonies came from Uber and Lyft drivers.

The rules specify the two options of vehicle identification to serve as counting functions. The insurance requirements only apply on airport grounds and to Honolulu county. It was noted that there is a major concern of airport TNC businesses throughout other counties to address permit licensing, with safety as a main priority. The rules assist in accounting purposes, for the consistency and accuracy in the revenue made at the airport and number of rides, and the amount paid to the airport for business and permits.

As the current pilot program will run until August 31st, DOT will assess whether to continue with the program upon the adoption of the rules; however, the intent is to let the pilot program run and have some time for Uber and Lyft to prepare and adjust to the new rules.

Chair Borge applauded DOT for staying on track to address and remedy questions while engaging stakeholders during the process. Mr. Ritchie also commended DOT for sticking with the process and answering concerns.

Vice Chair Cundiff made a motion to move the rules onto the Governor for adoption. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

V. ADMINISTRATIVE MATTERS

A. Assignment of Board Members’ “Discussion Leader Assignments” for State Agencies’ Administrative Rule Review

Discussion leader assignments were reviewed and adjusted in accordance to the recent changes in board members and preferences.

B. Update on the Board’s Upcoming Advocacy Activities and Programs in accordance with the Board’s Powers under Section 201M-5, HRS

Mr. Ritchie stated that the annual Small Business Fair, to be held Saturday, August 4th at Honolulu Community College, will begin at 7:30 a.m. Offered classes, totaling 25, start at 8:15 a.m., until 1:00 p.m. There will be about 35 exhibitors, of which DBEDT is one; this Board’s brochures will be available for distribution.

VI. NEXT MEETING – The next meeting is scheduled for Wednesday, August 15, 2018, in Conference Room 436, 250 South Hotel Street, Honolulu, Hawaii at 10:00 a.m.

VII. ADJOURNMENT – Mr. Nakamoto made a motion to adjourn the meeting and Ms. Albitz seconded the motion; the meeting adjourned at 11:05 a.m.

III. New Business

A. Discussion and Action on Proposed New Rules and Regulations for Kauai County Code Section 18-5.3, **Revocable Permits to Vend within County Right-of-Ways**, promulgated by Department of Parks and Recreation / County of Kauai

**PRE-PUBLIC HEARING
SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

Department or Agency: _____

Administrative Rule Title and Chapter: _____

Chapter Name: _____

Contact Person/Title: _____

Phone Number: _____

E-mail Address: _____ **Date:** _____

- A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.
- B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7? Yes No (If **Yes**, please provide webpage address and when and where rules may be viewed in person☺)

(Please keep the proposed rules on this webpage until after the SBRRB meeting.)

I. Rule Description: New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business? Yes No (If No, no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit enterprise consisting of fewer than one hundred full-time or part-time employees." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance? Yes No (If Yes, no need to submit this form.)

(e.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives.) HRS §201M-2(d)

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a)) Yes No (If Yes, no need to submit this form.)

* * *

If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

 - b. Amount of the proposed fee or fine and the percentage increase.

 - c. Reason for the new or increased fee or fine.

 - d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).
3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

7. How the agency involved small business in the development of the proposed rules.
 - a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.

- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.

- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.

- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.

- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594
Email: dbedt.sbrrb@hawaii.gov

This Statement may be found on the
SBRRB Website at:
<http://dbedt.hawaii.gov/sbrrb/small-business-impact-statements-pre-and-post-public-hearing>

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

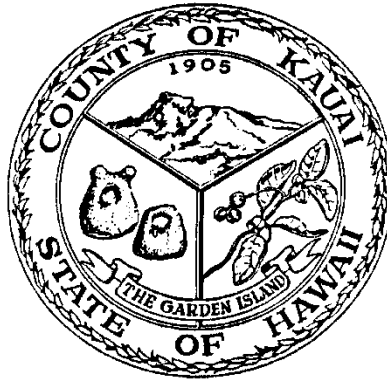
Revocable Permit for Vending Within County Right-of-Ways, Rules and Regulations that will apply to all applications and permits to vend or engage in any commercial activities within the rights of way under the jurisdiction of the County of Kaua‘i under Kaua‘i County Code §18-5.3, which includes “the entire width from property line to property line, including the berm, swale, or shoulder of a roadway owned and/or under the jurisdiction of the County of Kaua‘i except those roadway areas under the jurisdiction of the Department of Parks and Recreation pursuant to Chapter 23, Article 3, Kaua‘i County Code 1987, as amended.”

COUNTY OF KAUA'I

RULES AND REGULATIONS FOR

REVOCABLE PERMITS TO VEND WITHIN

COUNTY RIGHT-OF-WAYS



Adopted _____.

**RULES AND REGULATIONS FOR REVOCABLE PERMITS TO
VEND WITHIN THE COUNTY RIGHT-OF-WAYS**

I. GENERAL PROVISIONS

- A. Purpose. Pursuant to authority conferred by Kaua'i County Code §20-5.7, the purpose of these rules and regulations are to implement the revocable permit process for vending within the County's rights of ways.
- B. Scope. These rules shall apply to all rights of way under the jurisdiction of the County of Kaua'i as specified under Kaua'i County Code § 18-5.3.
- C. Definitions.
1. "Applicant" includes any individual eighteen years of age or older, organization, partnership, firm, association, trust, estate, private corporation, or other legal entity who has made a formal request or application for a permit to engage in commercial activity within County right-of-ways.
 2. "Vending" involves the advertising and/or sale of goods, food, beverages, wares, merchandise, or services to the general public.
 3. "Right of way" includes the entire width from property line to property line, including the berm, swale or shoulder of a roadway owned and/or under the jurisdiction of the County of Kaua'i except those roadway areas under the jurisdiction of the Department of Parks and Recreation pursuant to Chapter 23, Article 3 of the Kaua'i County Code.

II. APPLICATION FOR PERMIT AND REVIEW PROCESS

A. General Provisions.

1. All vending engaged within any County right-of-way must have a revocable permit pursuant to Kaua'i County Code Chapter 20, Article 5, unless the commercial activities are authorized or controlled by concession, contract or are part of a County-sponsored program, other than that described herein, or are exempt under Kaua'i County Code §23-3.4, as amended.
2. Permit applications shall be obtained from the Office of Economic Development (OED) at 4444 Rice Street, Suite 200, Līhu'e HI 96766.
3. A complete application and all application requirements stated under subsection II.C. of these Rules shall be submitted to OED a minimum of ninety (90) calendar days prior to any proposed event. Applications submitted after the ninety (90) calendar day minimum requirement may not be accepted. Applicants are encouraged to submit permit applications prior to ninety (90) days prior to any proposed event to accommodate agency review, potential bidding procedures, and public outreach.
4. The application may be reviewed by the County Engineer and other Departments when applicable to assure the safety of the public.
5. The Director of Finance will make every effort to issue a determination on any complete application a minimum of thirty (30) calendar days prior to any proposed event.

B. Bidding. When bidding is required pursuant to Kaua'i County Code Section 20-5.2, the following shall apply:

1. The bidding shall be subject to procedures specified under HRS Chapter 102.
2. Bid Notice shall include all submittal requirements and evaluation criteria, which may include, but shall not be limited to:
 - i. Experience in managing events of a similar nature
 - ii. Ability to provide required insurance
 - iii. Financial and organizational ability to meet permit conditions
 - iv. Promotion of Kaua'i Made and Kaua'i Grown products
 - v. Site plan and map
 - vi. Number of vendors or stands
 - vii. Evidence that the vendor engaged in Public Outreach when required by the Director of Finance

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PUBLIC HEARING: [date]

C. Application Requirements. The application shall contain or be accompanied by:

1. A non-refundable filing and processing fee in the amount of \$100
2. Any other information required by the Director of Finance or his designee, which may include, but not be limited to:
 - i. Experience in managing events of a similar nature
 - ii. Ability to provide required insurance
 - iii. Financial and organizational ability to meet permit conditions
 - iv. Promotion of Kaua'i Made and Kaua'i Grown products
 - v. Site plan and map
 - vi. Number of vendors or stands
 - vii. Evidence that the vendor engaged in Public Outreach when required by the Director of Finance
3. The Director of Finance may require the applicant to provide public outreach prior to permit approval. If required, the public outreach may include any of the following:
 - i. Noticing of nearby property and business owners
 - ii. Community meeting(s)
 - iii. Surveys or other means to gauge community support
4. When permits are requested in commercial districts, applicants shall notify adjacent businesses of the permit application and the adjacent businesses shall be provided an opportunity to comment on the application.

D. Criteria for Application Review. The Director of Finance, County Engineer, Fire Department, and/or the Police Department will consider the following criteria:

1. Public outreach to gauge community support
2. Adequate travel ways for cars and pedestrians
3. For road closures, adequate safety measures, which may include but not be limited to barriers, signage, detours
4. Maintenance of ADA clearances
5. Reduction/elimination of safety hazards, such as tripping, sight distance, or other obstructions.
6. Adequacy of facilities, including lighting, wastewater and solid waste
7. Whether the person or organization applying for the application has any outstanding bills related to previous permits issued for vending under Kaua'i County Code Chapter 20, Article 5

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PUBLIC HEARING: [date]

III. **PERMIT CONDITIONS AND RESTRICTIONS**

A. Permit Conditions. Any revocable permit for commercial activities in the County right-of-ways will be subject to conditions, which may include, but are not limited to the following:

1. Permits are non-transferable
2. Persons or organizations to whom permits are issued are bound by the permit conditions stipulated on or attached to the permit and any applicable Federal, State and County laws, ordinances and rules and regulations.
3. Permit fees that shall reflect the reasonable cost of administration of the activity by the County, or to meet other conditions as the Director of Finance or authorized representative may deem necessary. All costs associated with the conditions shall be borne by the permittee. Any costs incurred by the County resulting from the activity shall be reimbursed to the County. A draft estimate of the anticipated costs shall be provided to the permittee prior to the event.
4. All payments of fees and charges shall be in cash, personal check, cashier's check, certified check, postal money order, or bank money order.
5. The Director of Finance or authorized representative may impose permit conditions as needed to protect the health, safety, and welfare of the public. Such conditions may include, but are not limited to, the following:
 - i. Hiring of security staff
 - ii. County enforcement staff support
 - iii. Provision of portable toilets
 - iv. Provision of portable lighting
 - v. Traffic control, including barricades and/or signage
 - vi. Trash cleanup and pickup

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PUBLIC HEARING: [date]

6. Deposit. The Director of Finance or authorized representative reserves the right to require a deposit in an amount not to exceed one thousand dollars (\$1,000.00). Upon the failure to pay any reimbursement or charge as specified under the rules, the County will use the deposit to compensate the County for any charges it is due. The County will return any deposit amount that remains after all reimbursement or charges due to it are deducted, if any. Should the amount of reimbursement or charge due to the County exceed the amount of the deposit, the County reserves the right to institute legal action for collection. In the event such legal action for collection is instituted, the County shall be reimbursed for all costs of any collection action including reasonable attorneys' fees. In addition to the above, upon the failure to pay any reimbursement or charge as specified under this Agreement, the Party will be banned from applying for a revocable permit until all reimbursement or charges due to the County are fully paid.
7. Indemnification. The permittee will defend, indemnify and hold harmless County from and against any claims and demands for losses or damages (including claims for property damage, personal injury or wrongful death) arising from or growing out of any act, whether willful or negligence, of the permittee or any person claiming by, through or under permittee in connection with the commercial activities, and permittee will reimburse the County for any reasonable damages, losses, costs or expenses, including reasonable attorneys' fees, incurred in connection therewith. The permittee shall be fully responsible to compensate County or County's licensees for any damages.
8. Loss or Damage. The Permittee assumes all risks of loss or damage to the County's property from any cause, and agrees to return the premises to the County in the same or similar condition that existed prior to the event. Should loss or damage to the County's property be determined by the County within forty eight (48) hours of the event, the Permittee shall repair, reimburse or replace the equipment to the satisfaction of the County. If reimbursement is required by the County, the Permittee shall make such reimbursement within five (5) calendar days from the County's billing. All determinations made by the County are final.

9. Assumption of Risk. The County shall not be liable or responsible to the Permittee for any accidents, injuries, or damages occasioned by any means whatsoever, nor from any damage arising from any acts or neglect of any other party caused by the transportation, set-up, and use of dismantling of the County's property. The Permittee's use of the County's property shall be at the risk of Permittee only, and Permittee shall hold County harmless from any and all claims arising out of loss or damage to the same, including subrogation claims by Permittee's insurance carriers.
10. Release. In consideration of accepting and using the County's property for its event, the Permittee, its beneficiaries, heirs, executors, administrators, representatives, successors, and assigns, and any person or entity acting for, under, or through them, hereby releases and forever discharges the County, its officials, employees, representatives and agents, from and on account of any and all claims, actions, causes of action, claims for relief, damages, injuries, losses, punitive or treble damages, liens, debts, costs, interest, attorneys' fees, experts' or consultants' fees, expenses, and other relief, whether in law or in equity, whether known or unknown, suspected or unsuspected, fixed or contingent, past, present, and future, whether sounding in tort, contract, statute or otherwise, resulting from, arising out of, or connected with the Party's transportation, set-up, use of and dismantling of the equipment for its event.
11. No Subleasing. A rental fee may not be charged by the permittee for use of public rights-of-way or facilities covered by the permit.
12. Kaua'i Products. Vending of Kaua'i Grown and Kaua'i Made products is strongly encouraged.

- B. Denial of Permit. Application for permits may be denied for reasons, which may include, but are not limited to:
1. A state of emergency is declared by the Director of Finance or other proper authorities
 2. Natural or civil disturbances, including but not limited to tsunamis, floods, earthquakes, storms, riots, demonstrations, and employee strikes occur or threaten to occur.
 3. The County Engineer determines that the proposed permit action is unsafe or causes a nuisance
 4. The proposed permit action is opposed by the affected community
 5. Permits for the vending of cars or parking of cars for sale or rent in the public right of way shall be denied
 6. There is already an existing and active permit that covers any portion of all of the proposed area and/or date and time of the proposed commercial activity event
 7. There are any deficiencies in the permit application

IV. REVOCATION, MODIFICATION, OR TERMINATION OF PERMIT

A. Revocation or Modification.

1. Notice. The Director of Finance shall provide prompt written notice to the permittee of any action to revoke or modify a permit for the following reasons:
 - i. A permittee violates permit conditions or other provisions of these rules
 - ii. The circumstances under which the permit was considered have substantially changed as determined by the Director of Finance or authorized representative
2. Notice Requirements. Written notice of revocation and/or modification, when applicable, shall state the following:
 - i. The date of the Notice of Violation
 - ii. Permit number, event, location of the event, and the name and address of the person noticed
 - iii. The nature of the violation
 - iv. Any terms for the revocation or modification, including a description of the items to be done to correct any violation
 - v. The deadline for compliance with the Notice of Violation
 - vi. The penalties that will be imposed if compliance of the Notice of Violation is not met, which may include permit revocation, fine, and liability for any injuries to person or property and to the County resulting from the owner's failure to clear the hazard
 - vii. The Notice of Violation may be appealed upon notice within thirty (30) days of service to Director of Finance, and if not appealed, the Notice of Violation shall become final thirty (30) days after the date of service
3. Automatic Revocation or Modification. Permits may be revoked or modified at any time without prior notice when any of the following occurs:
 - i. A state of emergency is declared by the Director or other proper authorities
 - ii. Natural or civil disturbances, including but not limited to, tsunamis, floods, earthquakes, storms, riots, demonstrations and employee strikes occur or threaten to occur
 - iii. Fees, as required, are not paid

PUBLIC NOTICE: [date] (Posted with Office of County Clerk); [date] (Publications, Garden Island Newspaper and Star Advertiser)

PUBLIC HEARING: [date]

B. Permit Termination Due to Non-Use.

1. Failure to use a permit at the designated time and place shall not result in a refund or credit of fees previously paid, unless otherwise determined by the Director of Finance

DRAFT

PUBLIC NOTICE: [date] (Posted with Office of County Clerk); [date] (Publications, Garden Island Newspaper and Star Advertiser)

PUBLIC HEARING: [date]

V. APPEALS OF PERMIT DECISIONS

A. General Provisions.

1. Appeals. The petition for appeal shall be submitted to the Director of Finance and shall be filed within thirty (30) days of service of the Director's decision to approve, deny, revoke, or modify a permit. The petition shall contain the following:
 - i. The name, address and telephone number of the appellant.
 - ii. The identification of the appellant's proposed event and location.
 - iii. All pertinent facts.
 - iv. The action of the Director of Finance.
 - v. The reasons for the appeal, including a statement as to why the appellant believes that the Director's action was in violation of the applicable law, or is clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record, or is arbitrary, or capricious, or characterized by an abuse of discretion or clearly unwarranted exercise of discretion.
 - vi. Petitions not in conformance with these requirements shall be rejected by the Director of Finance.
2. Standing. Only aggrieved parties have standing to appeal an action under these rules.
3. Hearing Officer. Upon receipt of the petition for appeal, the Director of Finance shall within a reasonable time thereafter appoint a Hearings Officer who shall not be an employee of the Department of Finance. The Hearings Officer shall afford the petitioner and all other parties an opportunity to be heard. Such hearing shall be conducted in conformity with the applicable provisions established herein for contested case hearings before the Hearings Officer.
 - i. Hearings Officer Action.
 - a. A Hearings Officer appointed by the Director of Finance pursuant to these rules and other applicable law shall render his or her decision within sixty (60) days of the close of the evidentiary portion of the hearing.
 - b. A longer period to render any decision by the Hearings Officer may be permitted by agreement of all parties.
4. Definitions.
 - i. "Contested Case" means a proceeding in which the legal rights, duties or privileges of specific parties are required by law to be determined after an opportunity for agency hearing.
 - ii. "Department" means the Department of Finance or its authorized representative.

PUBLIC NOTICE: [date] (Posted with Office of County Clerk); [date] (Publications, Garden Island Newspaper and Star Advertiser)

PUBLIC HEARING: [date]

- iii. "Director" means the Director of Finance or his or her authorized representative.
- iv. "Hearing" refers only to such hearing held by the Hearings Officer immediately prior to a judicial review of a Contested Case as provided in Section 91-14 HRS.
- v. "Hearings Officer" means any person or persons designated and authorized by the Director of Finance to conduct a hearing for the purpose of taking testimony and to report his or her findings of facts and conclusions of laws and decision and order.
- vi. "HRS" means Hawai'i Revised Statutes.
- vii. "Party" means a Petitioner or Petitioners and the Department or Director.
- viii. "Person" includes individuals, partnerships, corporations, associations, or public or private organizations of any character other than agencies.
- ix. "Petitioner" means a person who seeks to appeal a decision of the Director of Finance issued pursuant to his or her authority under the Kaua'i County Code Chapter 20, Article 5.
- x. "Proceeding" means a matter that is submitted to a Hearings Officer designated and authorized by the Director of Finance to conduct a hearing for the purpose of taking testimony and reporting his or her findings of facts and conclusions of laws and decision and order.

B. General Requirements in Proceedings Before the Hearing Officer.

1. Who May Appear Before the Hearing Officer. Any party to a proceeding before the Hearings Officer may appear in his or her own behalf or as an authorized representative of a partnership, corporation, trust or association and an officer or employee of a department or agency of the State or a political subdivision may represent that department or agency in any proceeding before the Hearings Officer. If a party is to be represented by an attorney, that attorney who appears before the Hearings Officer shall be in good standing before the Hawai'i Supreme Court. The Hearings Officer may at any time require any person appearing before him/her, in a representative capacity, to show proof of his or her authority and qualification to act in such capacity.
2. Code of Ethics. Any person who signs a pleading or brief, enters an appearance at a hearing, or transacts business with the department, by such act represents that he or she is legally authorized to do so and shall comply with the laws of this State and the County of Kaua'i, and the rules and regulations of the department; and further, he or she shall maintain the respect due to the Hearings Officer and shall never deceive or knowingly present any false statements of fact or law to the Hearings Officer.

C. Requirements of Filing of Documents.

1. Time and Place. All pleadings, briefs, submittals, petitions, reports, maps, exceptions, memoranda and other legal papers required to be filed with the Hearings Officer in any proceeding shall be filed with the Hearings Officer at his or her place of business, and shall be served on all parties to the proceeding. Unless otherwise ordered, the date on which the papers are accepted shall be regarded as the date of filing.
2. Format. All submittals shall be clearly and permanently legible and in such form as may be prescribed by the Hearings Officer. The original shall be signed in ink by each party or his or her counsel and show the address of such person.
3. Copies. Unless otherwise required by these rules or the Hearings Officer, there shall be filed with the Hearings Officer, an original and two copies of each submittal thereof. Additional copies shall be promptly provided if the Hearings Officer so requests.
4. Extensions of Time. Whenever a party is required to file a pleading within the period prescribed or allowed by these rules, by notice given there under or by an order or regulation, the Hearings Officer may (1) for good cause before the expiration of the prescribed period, with or without notice to the parties, extend such period, (2) pursuant to a stipulation between all of the parties, extend such period, and/or (3) permit the act to be done after the expiration of the specified period where the failure to act is clearly shown to be the result of excusable neglect. All requests for continuances, except for stipulations, should be by written motion, unless it is made during the course of a hearing.
5. Amended Pleadings. All pleadings may be amended at any time prior to the hearing. Amendments offered prior to the hearing shall be served on all parties and filed with the Hearings Officer. All parties shall have the opportunity to answer and be heard on amendments filed after the hearing commences, and the Hearings Officer shall decide whether such amendments shall be allowed.

D. Service of Process.

1. By Whom Served. The Hearings Officer shall serve copies of all orders, notices and other papers issued by him or her, together with any other papers that are required by law. All other papers shall be served by the parties filing them.
2. Upon Whom Served. All papers served by either the Hearings Officer or any party shall be filed and served upon all parties through their counsel if they have retained counsel and shall contain a certificate of service attesting to such service. Any counsel entering an appearance subsequent to the initiation of such proceeding shall notify all other counsel of record and all parties not represented by counsel of such fact.
3. Service Upon Parties. The final decision and order, and any other paper required to be served by the Hearings Officer upon a party, shall be served upon such party or his/her counsel of record.
4. Method of Service. Service of papers shall be made personally or, unless otherwise provided by law, by mail to the last known address of the party or his/her counsel of record.
5. When Service is Complete. Service upon parties other than the Hearings Officer shall be regarded as complete upon mailing or upon personal service unless otherwise specifically directed by the Hearings Officer.
6. How Made. Whenever under these rules service is required or permitted to be made upon a party represented by an attorney the service shall be made upon the attorney unless service upon the party is ordered by the Hearings Officer.
 - i. Service upon the attorney or upon a party shall be made (a) by delivering a copy to the attorney or party; or (b) by mailing it to the attorney or party at the attorney's or party's last known address; or (c) if no address is known, by leaving it with the clerk of the Director; or (d) if service is to be upon the attorney, by email transmission to the attorney's business email address.
 - ii. Delivery of a copy within this rule means: handing it to the attorney or to the party; or leaving it at the attorney's or party's office with a clerk or other person in charge thereof; or, if there is no one in charge, leaving it in a conspicuous place therein; or, if the office is closed or the person to be served has no office, leaving it at the person's dwelling house or usual place of abode with some person of suitable age and discretion then residing therein.
 - iii. Service by mail is complete upon mailing. Service by email transmission is complete upon receipt of the entire document by the intended recipient and between the hours of 8:00 a.m. and 5:00 p.m. on a week day. Service by email transmission that occurs after 5:00 p.m. shall be deemed to have occurred on the next week

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day. Email transmission means transmission and receipt of the entire document without error with a cover sheet which states the attorney(s) to whom it is directed, the case name and case number, and the title and number of pages of the document.

- iv. Service by email transmission shall be confirmed by a certificate of service which declares that service was accomplished by email transmission to a specific phone number, on a specific date, at a specific time.

E. Times.

1. Computation. In computing any period of time prescribed or allowed by these rules, by order of the Hearings Officer, or by any applicable statute, the day of the act, event, or default after which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, a Sunday or a holiday, in which event the period runs until the end of the next day which is not a Saturday, a Sunday or a holiday. When the period of time prescribed or allowed is less than 7 days, intermediate Saturdays, Sundays and holidays shall be excluded in the computation. As used in this rule, "holiday" includes any day designated as such pursuant to section 8-1 of the Hawai'i Revised Statutes.
2. Enlargement. When by these rules or by a notice given thereunder or by order of the Hearings Officer an act is required or allowed to be done at or within a specified time, the Hearings Officer for cause shown may at any time in his or her discretion (1) with or without motion or notice order the period enlarged if request therefor is made before the expiration of the period originally prescribed or as extended by a previous order or (2) upon motion made after the expiration of the specified period permit the act to be done where the failure to act was the result of excusable neglect.

VI. HEARING PROCEDURES

A. Hearing Officer.

1. The Hearings Officer shall control the course of the hearing, administer oaths, receive evidence, hold appropriate conferences before or during hearings, rule on all objections or motions, receive offers of proof, fix the time for the filing of submittal, dispose of any other matter that normally and properly arises in the course of a hearing, and take all other actions authorized by law that are deemed necessary to the orderly and just conduct of the hearing.

B. Parties. The Department of Finance and the petitioner shall in every case be parties to such proceedings.

C. Continuance. The Hearings Officer may, for good cause, postpone or continue any hearing from day to day, or to a later date, or to a different place without notice other than the announcement thereof at the hearing.

D. Ex Parte Communication. No person whether or not a party to a hearing before the Hearings Officer shall communicate ex parte regarding any subject matter of the proceeding with the Hearings Officer.

E. Notice of Hearing.

1. The notice of hearing shall be served upon all parties at least fifteen (15) days prior to the hearing date, unless otherwise provided by law.
2. The notice shall contain the appropriate information as required in HRS, 91-9.

F. Waiver of Procedure. Any procedure pursuant to these rules may be modified or waived by stipulation of the parties and informal disposition may be made of any hearing by stipulation, settlement, agreement, consent order, or default.

G. Prehearing Conference. The Hearings Officer may hold a prehearing conference with the parties for the purpose of formulating or simplifying the issues, arranging for the exchange of proposed exhibits or proposed witness testimony, setting of schedules, exchanging names of witnesses, limitation of number of witnesses, and such other matters as may expedite orderly conduct and disposition of the proceeding.

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- H. Requests for Transcripts. Unless otherwise provided by law or specifically ordered by the Hearings Officer, it shall not be necessary to transcribe the record unless required for purposes of rehearing or court review. Should a party to a hearing under these rules desire that transcripts be provided when not otherwise required, the party may, prior to commencement of hearing, either; (1) deposit an amount sufficient to cover transcribing and printing costs as prepared by a certified court reporting service; (2) provide a certified court reporting service at the hearing; (3) enter into an agreement with the County that will address the preparation and printing costs of transcripts.
- I. Just, Expeditious, and Inexpensive Determination.
1. To avoid unnecessary cumulative evidence, the Presiding Officer may limit the number of witnesses or the time for testimony upon a particular issue.
 2. The Presiding Officer shall not order or approve civil style discovery against non-parties; and unless stipulated to by all parties, the hearings officer shall not order or approve civil style discovery between parties. Civil style discovery refers to procedures initiated by parties under judicial rules of civil procedure, specifically including but not limited to, depositions on oral or written questions, written interrogatories, requests for production of documents or things, requests to enter land or other property, physical and mental examinations, and requests for admissions.
- J. Stipulation as to Findings of Facts, Conclusions of Law. Nothing in these rules shall prohibit parties from entering into appropriate stipulations as to findings of fact, conclusions of law, and conditions, if any, concerning the subject petition for appeal.
1. A petitioner who desires to enter into a stipulation shall prepare a stipulation as to any and all findings of fact, conclusions of law, and conditions, if any, concerning the subject petition.
 2. All parties shall sign the proposed stipulation as to any or all proposed findings of fact, conclusions of law, and conditions and a proposed decision and order, if at all, and shall submit such stipulation to the Hearings Officer seven (7) days prior to the hearing date, unless otherwise permitted by the Hearings Officer.
 3. The Hearings Officer may require the parties to submit additional evidence concerning the stipulation and proposed decision and order.
 4. The Hearings Officer may approve the proposed decision and order by amending or adopting the proposed decision and order.

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- K. Order of Hearing Procedure. At the commencement of the hearing, the Hearings Officer may read the notice of hearing and then briefly outline the procedures to be followed, which shall be in the following manner:
1. Presentation of Evidence. The petitioner's presentation shall be first, followed by the Department.
 2. Cross-Examination. Each Party shall have the right to conduct such cross-examination of other Parties and their witnesses as may be required for a full and true disclosure of the facts. The order of cross-examination and re-cross shall be determined by the Hearing Officer.
 3. Rebuttal Evidence. Each Party shall be afforded the opportunity for rebuttal in the same order as above.
 4. Close Contested Case Hearing. Upon completion of all testimony and evidence submitted by each party and their witnesses, the Hearing Officer shall close the Contested Case portion of the Hearing.
 5. Request to Submit Proposed Findings of Fact, Conclusions of Law, Decision and Order. A party may, after the close of the evidentiary portion of the hearing request the opportunity to submit proposed Findings of Fact, Conclusion of Law, Decision and Order. If such a request is made, the Hearings Officer shall also allow all other parties to submit proposed Findings of Fact, Conclusion of Law, Decision and Order. Should a party not submit a request at such time, the party's right to submit such document shall be deemed waived and the Hearings Officer may commence with appropriate decision-making action. If a request is made, the Hearings Officer may continue the docket and set a timetable for the conduct of the post-hearing proceedings pursuant to these rules.
- L. Co-Counsel. No more than two (2) counsel may appear for any party at any proceeding before the Hearings Officer. Where a party is represented by more than one counsel, only one of the counsel shall be permitted to cross-examine a witness or to state any objections or make closing arguments.

M. Requests for Subpoenas.

1. Subpoenas of Witnesses. Requests for the issuance of subpoenas requiring the attendance of a witness for the purpose of taking oral testimony before the Hearings Officer shall be in writing, and shall state the reasons why the testimony of the witness is believed to be material and relevant to the issues involved. Only parties or the Hearings Officer may request the issuance of a subpoena.
2. Every subpoena shall state the title of the proceeding for which it is to be issued, and shall command each person to whom it is directed to attend and give testimony at a time and place therein specified.
3. Subpoenas Duces Tecum. Requests for the issuance of subpoenas for the production of documents or records shall be in writing; shall specify the particular document or record, or part thereof, desired to be produced; and shall state the reasons why the production thereof is believed to be material and relevant to the issues involved.
4. Who May Issue Subpoenas. Subpoenas may only be issued by the Hearings Officer. No subpoena shall be issued unless the party requesting the subpoena has complied with the provisions herein and gives the names and address of the desired witness. Signed and sealed blank subpoenas shall not be issued to anyone. The name and address of the witness shall be inserted in the original subpoena, a copy of which shall be filed in the proceeding. Subpoenas shall show at whose instance the subpoena is issued. The parties at whose instance a subpoena is issued shall arrange for service thereof, and shall file a return and an acknowledgment of service thereon.
5. Fees and Mileage. Witnesses summoned shall be paid the same fees and mileage as are paid witnesses in Circuit Courts of the State of Hawai'i and such fees and mileage shall be paid by the party at whose instance the witness appears.
6. Oath. Witnesses shall be sworn under oath or affirmation prior to testifying.

N. Consolidation. The Hearings Officer, upon his/her own initiative or upon motion may consolidate for hearing or for other purposes, or may contemporaneously consider, two or more proceedings which involve substantially the same parties or issues which are the same or closely related if he/she finds that such consolidation or contemporaneous consideration will be conducive to the proper dispatch of its business and to the ends of justice and will not unduly delay the proceedings.

- O. Substitution of Parties. Upon motion and for good cause shown, the Hearings Officer may order substitution of parties, except that in the case of death of a party, substitution may be ordered without the filing of a motion.
- P. Motions.
1. All motions, other than those made during a hearing, shall be made in writing to the Hearing Officer, shall state the relief sought, and shall be accompanied by an affidavit, declaration, and/or memorandum setting forth the grounds upon which they are based.
 2. All motions are non-hearing and shall be decided upon written submission, unless the Hearing Officer elects to set a time for hearing.
 3. Unless otherwise specified by the Hearing Officer, a memorandum in opposition or a counter affidavit or declaration may be filed and served on all parties no later than fifteen (15) days after service of the motion.
 4. No reply or supplemental memoranda shall be filed unless specifically allowed by the Hearing Officer.
 5. The original documents and proof of service shall be filed with Hearing Officer. When service is made by mail, two calendar days shall be added to the periods required in 6.15C.
 6. Unless otherwise specified by the Hearing Officer, all pretrial motions shall be filed no later than twenty (20) days prior to the assigned contested case hearing date.

Q. Evidence.

1. Form and Admissibility. The Hearings Officer shall not be bound by the Hawai'i Rules of Evidence relating to the admission or rejection of evidence, but may exercise his/her own discretion in such matter with a view towards insuring that justice is served.
2. Burden of Proof. Except as otherwise provided by law, the party initiating the petition to appeal shall have the burden of proof, including the burden of producing evidence as well as the burden of persuasion. The degree or quantum of proof shall be a preponderance of the evidence.
3. Exclusion of Irrelevant Material. As a matter of policy, the Hearings Officer shall provide for the exclusion of irrelevant, immaterial, or unduly repetitious evidence.
4. Ruling. The Hearings Officer shall rule on the admissibility of all evidence.
5. Objections and Exceptions. When objections are made to the admission or exclusion of evidence, the ground relied upon shall be stated briefly. Formal exceptions to rulings are unnecessary and need not be taken.
6. Offer of Proof. An offer of proof for the record shall consist of a statement of the substance of the evidence to which the objection has been sustained.
7. Prepared Testimony. With the approval of the Hearings Officer, a witness may read into the record his/her testimony on direct examination. Before any prepared testimony is read, unless excused by the Hearings Officer, the witness shall deliver copies thereof to the Hearings Officer, and all counsel or parties. If the Hearings Officer deems that substantial savings in time will result, a copy of the prepared testimony may be received in evidence without hearing, provided that copies thereof shall have been served upon all parties and the Hearings Officer to permit proper cross examination of the witness on matters contained in said prepared testimony.
8. Documentary Evidence. If relevant and material matter offered in evidence is embraced in a document containing other matters, the party offering it shall designate specifically the matter so offered. If other matter in the document would unnecessarily encumber the record, the document will not be received in evidence, but at the discretion of the Hearings Officer, the relevant and material matter may be read into the record or copies thereof received as an exhibit. Other parties shall be afforded opportunity to examine the document, and to offer in evidence other portions thereof believed material and relevant.
9. Exhibits.
 - i. Form-Size. Exhibits shall be clearly and permanently legible and in such form as may be prescribed by the Hearings Officer.

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Exhibits shall be bound or folded to the respective approximate size, where practical. Wherever practicable, sheets of each exhibit shall be numbered and data and other figures shall be set forth in tabular form.

- ii. Copies. When exhibits are offered in evidence, and when practicable the original and two (2) copies shall be furnished to the Hearings Officer with a copy to each party to the proceeding, unless such copies have been previously furnished or the Hearings Officer directs otherwise.
10. Official Notice of Facts. Official notice may be taken of such matters as may be judicially noticed by the courts of the State of Hawai'i. Official notice may also be taken of generally recognized technical or scientific facts within the Department's specialized knowledge when parties are given notice either before or during the hearing of the material so noticed and afforded the opportunity to contest the facts so noticed.
11. Additional Evidence. No supplemental evidence shall be accepted into the record after the evidentiary portion of the hearing is closed unless agreed to by the parties and approved by the Hearings Officer.

R. Post Hearing Procedures.

1. Upon completion of taking of evidence, the Hearings Officer shall issue findings of fact, conclusions of law, and decision and order that states an analysis and reasons therefore, and shall submit the report of the proceeding and the record to the Department.
2. The record shall include the petition, notice of hearing, motions, rulings, orders, transcript of the hearing, if required, documentary evidence, stipulations, findings of fact, or other documents submitted by the parties, objections to the conduct of the hearing and the report of the Hearings Officer and all other matters placed in evidence.
3. The Hearings Officer shall cause a copy of the report to be served upon all parties to the proceedings.
4. Any party aggrieved by a final decision and order by the Hearings Officer or by a preliminary ruling of the nature that deferral of review pending entry of a subsequent final decision would deprive appellant of adequate relief is entitled to judicial review thereof under Chapter 91 of the HRS; but nothing in this section shall be deemed to prevent resort to other means of review, redress, relief, or trial de novo, including the right of trial by jury, provided by law.

**A BILL FOR AN ORDINANCE TO AMEND CHAPTERS 18, 20, AND 23,
KAUAI COUNTY CODE 1987, AS AMENDED, RELATING TO
REVOCABLE PERMITS IN COUNTY DESIGNATED RIGHTS-OF-WAY**

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. Findings and Purpose: The purpose of this bill is to clarify the process and responsibilities for the permitting of vending on County-owned property. The Council finds that under certain circumstances, vending on public property can have a benefit to economic development of our County and can provide for the revitalization of historic towns.

The Council further finds that the process for regulating vending should be clarified to distinguish vending between properties under the jurisdiction of the Department of Parks and Recreation and properties under the jurisdiction of the Department of Public Works, such as County rights-of-way. The Council further finds that given Act 115 of the 2013 Legislature now provides a permitting process for the State Department of Transportation to allow vending on State highways, the County now has the ability to issue similar revocable permits for limited vending within County rights-of-way, subject to terms of use and mitigation conditions to limit the impact to other users of County properties.

SECTION 2. Chapter 18, Kauai County Code 1987, as amended, is hereby amended by adding a new Article 5 as follows:

“ARTICLE 5. VENDING FROM COUNTY RIGHTS-OF-WAY PROHIBITED

Section 18-5.1 Restrictions.

(a) No person shall park or place a vehicle or structure wholly or partly on any County right-of-way for the purpose of selling therefrom or therein any article, service, or thing without a permit, thereby creating a hazardous condition or a public nuisance or in reckless disregard of the risk of creating a hazardous condition or public nuisance.

(b) The Department of Public Works may remove or require the immediate removal of the vehicle or structure from the right-of-way.

Section 18-5.2 Revocable Permit.

(a) The County Engineer, in the case of County rights-of-way, may, upon application in writing, approve a revocable permit pursuant to Chapter 20, Article 5, Kaua'i County Code 1987, as amended, subject to any terms and mitigation conditions imposed by the County Engineer or his designee, authorizing the applicant to vend in the right-of-way.

(b) If the revocable permit application includes temporary road closures, approval of the revocable permit by the Chief of Police is also required.

Section 18-5.3 Definition of "right-of-way."

For the purposes of this section, "right-of-way" means the entire width from property line to property line, including the berm, swale, or shoulder of a roadway owned and/or under the jurisdiction of the County of Kaua'i except those roadway areas under the jurisdiction of the Department of Parks and Recreation pursuant to Chapter 23, Article 3, Kaua'i County Code 1987, as amended.

Section 18-5.4 Enforcement and Penalty.

(a) In addition to or in lieu of any administrative actions and penalties issued pursuant to Chapter 20, Article 5, Kaua'i County Code 1987, as amended, any act prohibited under this Article shall be a traffic infraction-level offense that is subject to the penalties and procedures provided for in Chapter 16, Article 21, Kaua'i County Code 1987, as amended, and Hawai'i Revised Statutes Chapter 291D.

(b) Any person convicted of violating this Article shall be fined five hundred dollars (\$500) per offense.

(c) Each day a violation continues may be counted as a separate offense."

SECTION 3. Chapter 18, Article 1, Section 18-1.2, Kaua'i County Code 1987, as amended, is hereby amended as follows:

"Sec. 18-1.2 Restricted Uses.

The County Council may, if it deems necessary for the purpose of preserving the public health, safety and welfare, restrict the following uses of any road, street and highway under its jurisdiction by prohibiting:

(a) Use of a loud speaker or sound amplifier for projection of sound from any vehicle.

(b) Use by a commercial vehicle or by specific types of vehicles or by vehicle weight, load or size.

(c) Use for commercial, business, or other income motivated purpose for private gain or charitable [purposes.] purposes, unless a revocable permit is issued by the Finance Director and approved by the County Engineer pursuant to Chapter 20, Article 5 of this code.

(d) Use for processions or assemblages.”

SECTION 4. Chapter 18, Article 1, Section 18-1.4, Kaua‘i County Code 1987, as amended, is hereby amended as follows:

“Sec. 18-1.4 Penalties.

Any person convicted of violating any restrictive use set by resolution of the Council pursuant to this Article shall be subject to the penalties provided for in [Section 16-21.8] Section 16-21.6 of the Kaua‘i Traffic Code.”

SECTION 5. Chapter 20, Article 5, Section 20-5.2, Kaua‘i County Code 1987, as amended, is hereby amended as follows:

“Sec. 20-5.2 Exceptions to Bidding Requirement.

The Finance Director may grant revocable permits approved by the County Attorney as to form and legality, without calling for public bids, when:

(a) The intended use does not conflict with use for immediate public purposes; and

(b) There is no reasonable alternative other than the use of public property; and

(c) The proposed use does not create a nuisance or unreasonably affect public health or welfare; and

(d) There is no conflicting request for use of the particular public [property; and] property.

[(e) The revocable permit shall be limited to a month-to-month basis or less.]”

SECTION 6. Chapter 20, Article 5, Section 20-5.3, Kaua'i County Code 1987, as amended, is hereby amended as follows:

"Sec. 20-5.3 [Rental.] Rental and Application.

(a) For use by nonprofit organizations or governmental agencies for public purposes, the rental shall be one dollar (\$1.00) per month. "Nonprofit organization" is defined to mean an association, corporation, or other entity organized and operated exclusively for religious, charitable, scientific, literary, cultural, educational, recreational, or other nonprofit purposes, no part of the assets, income, or earnings of which inures to the benefit of any individual or member thereof.

(b) For use by others, the rental shall be the fair market rental value as [jointly] established by the Finance Department [and the Department of Public Works], or at the option of the user, the rental shall be the fair market rental value as established by a disinterested appraiser paid for by the user and approved by the Finance Department.

(c) Improvements to be made by the user that will benefit the County after the permit expires may be considered in establishing the rent. However, improvements constructed shall be at the risk of the user and no damages or claims shall be payable to the user upon termination of the permit.

(d) When bidding is not required pursuant to Section 20-5.2, Kaua'i County Code 1987, as amended, a rental fee shall not be assessed for properties designated as a County public right-of-way.

(e) The user shall execute an agreement with the County specifying the terms of the use of the property and any mitigation that may be required by any of the County's agencies. For properties under the jurisdiction of the Department of Public Works, the County Engineer shall also review and approve the revocable permit.

(f) Unless the event is sponsored by the County of Kaua'i, each application for a revocable permit pursuant to this part shall be assessed a non-refundable application fee of one hundred dollars (\$100.00).

(g) Revocable permits issued under this section shall be revocable on notice of thirty (30) days or less and shall not exceed a period of one year."

SECTION 7. Chapter 20, Article 5, Kaua'i County Code 1987, as amended, is hereby amended by adding new sections 20-5.5, 20-5.6, and 20-5.7 as follows:

“Sec. 20-5.5 Penalties and Enforcement.

(a) Any activities performed without a permit, beyond the scope of a permit, or not in compliance with a permit shall be a traffic infraction-level offense subject to the penalties and procedures provided for in Chapter 18, Article 5, and Chapter 16, Article 21, Kaua‘i County Code 1987, as amended, and Chapter 291D, Hawai‘i Revised Statutes.

(b) In addition to or in lieu of any penalties pursuant to Chapter 18, Article 5, and Chapter 16, Article 21, Kaua‘i County Code 1987, as amended, and Chapter 291D, Hawai‘i Revised Statutes, the Director of Finance may suspend or revoke a permit that was issued under the provisions of this Article whenever:

(1) the permit was issued based on incorrect information supplied;

(2) any activities are not being performed in accordance with the terms and provisions of the permit;

(3) it is determined that the permittee had not complied with this Article or any provision of any other applicable law, ordinance, rule, or regulation of the State of Hawai‘i or the County of Kaua‘i;

(4) whenever the activities are deemed unsafe as determined by the Director of Finance; or

(5) the circumstances under which the permit was considered have substantially changed as determined by the Director of Finance or authorized representative.

(c) Where a permit is suspended or revoked for any reason, there shall be no refund of any permit fee.

Sec. 20-5.6 Administrative Appeals.

Within thirty (30) days of service, decisions to approve, deny, suspend, revoke, or modify a permit may be appealed in accordance with rules of practice and procedure established pursuant to Chapter 91, Hawai‘i Revised Statutes.

Sec. 20-5.7 Rulemaking Authority.

Pursuant to Chapter 91, Hawai‘i Revised Statutes, the Director of Finance may promulgate rules to carry out the purposes of this Article.”

SECTION 8. Chapter 23, Article 3, Section 23-3.2, Kaua'i County Code 1987, as amended, is hereby amended as follows:

"Sec. 23-3.2 Definitions.

When used in this Article the following words or phrases shall have the meaning given in this Section unless it shall be apparent from the context that a different meaning is intended:

"Concession" means the grant to a private individual, partnership or corporation of the privilege for a fee to conduct operations essentially retail in nature, involving the sale and/or rental of goods, services, wares, novelties or any merchandise to consumers in or on land or structures owned or controlled by the [County of Kaua'i.] Department of Parks and Recreation.

"Concession stands" mean structures owned or controlled by the County of Kaua'i which uses are granted to private individuals, partnerships, or corporations for a fee to conduct operations essentially retail in nature involving the sale and/or rental of goods, services, wares, novelties, or any merchandise to consumers.

"Concessionaire" means a private individual, partnership, or corporation that has been granted the privilege for a fee to conduct operations essentially retail in nature involving the sale and/or rental of goods, services, wares, novelties, or any merchandise to consumers in or on land or structures owned or controlled by the [County of Kaua'i.] Department of Parks and Recreation.

"Peddler" means a person or persons in the business of traveling about carrying goods, wares, food, or merchandise for sale and/or rental to consumers, or any person traveling about selling, renting, or offering for sale, or rent, soliciting orders for or inviting attention to or promoting in any manner whatsoever, directly or indirectly, goods, wares, merchandise, foodstuffs, refreshments, or other kinds of property or services, or to distribute commercial handbills, or carry on or conduct any commercial promotional scheme, advertising programs, or similar activity, or any person or persons in business of delivering food, foodstuffs, or refreshments to consumers at a place other than the peddler's fixed place of business, or any person or persons in the business of traveling about to deliver food, foodstuffs, or refreshments to consumers, or any person or persons engaged in the business or service of providing sport or recreational activities or rental of equipment therefor for commercial gain on either a fee basis or a donation in lieu of a fee and activities associated therewith, including but not limited to loading and unloading of passengers, transporting passengers, parking, or traversing over and through County parks.

“Peddling” means the carrying on of business by a peddler.”

SECTION 9. Chapter 23, Article 3, Section 23-3.5, Kaua‘i County Code 1987, as amended, is hereby amended as follows:

“Sec. 23-3.5 Peddling Prohibition; Prima Facie Evidence.

(a) It shall be unlawful to violate any of the rules and regulations adopted pursuant to Sec. 23-3.3.

(b) It shall be unlawful to engage in peddling without a valid peddler’s license in the peddler’s possession, or to operate at a location not authorized thereby, or to transfer a peddler’s license to another, or to alter or possess an altered peddler’s license.

(c) Peddling shall be unlawful without a permit issued by the Director of Parks and Recreation within County parks, playgrounds, beaches, roads, parking lots, and other facilities[, or on or alongside roads, parking lots or other] and areas subject to, or adjacent to, facilities under the jurisdiction of the [County and abutting thereto.] Department of Parks and Recreation, including unpaved roadway areas adjacent to parks.

(d) Peddling shall be unlawful without a permit issued by the Director of Parks and Recreation in any area subject to [County] Department of Parks and Recreation jurisdiction between the ocean and the abutting property line, including, but not limited to, parking lots and County parks on the island of Kaua‘i.

(e) Prima Facie Evidence; Peddling. The presence of a peddler without a permit issued by the Director of Parks and Recreation in any areas described in either Subsection (c) or (d) of this Section, with the peddler’s or his/her employer’s goods, wares, novelties, merchandise, foodstuffs, refreshments, or other property or services shall constitute prima facie evidence of peddling, in violation of said Subsection.”

SECTION 10. If any provision of this ordinance or application thereof to any person, persons, or circumstances is held invalid, the invalidity does not affect the other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are severable.

SECTION 11. Ordinance material to be repealed is bracketed. New ordinance material is underscored. When revising, compiling or printing this ordinance for inclusion in the Kaua‘i County Code, 1987, as amended, the brackets, bracketed material, and underscoring shall not be included.

SECTION 12. This Ordinance shall take effect upon approval.

Introduced by: /s/ DEREK S.K. KAWAKAMI

/s/ ROSS KAGAWA

DATE OF INTRODUCTION:

March 14, 2018

Līhu'e, Kaua'i, Hawai'i

V:\BILLS\2016-2018 TERM\Bill No. 2697, Draft 1 (AMK:aa)

CERTIFICATE OF THE COUNTY CLERK

I hereby certify that heretofore attached is a true and correct copy of Bill No. 2697, Draft 1, which was adopted on second and final reading by the Council of the County of Kaua'i at its meeting held on April 25, 2018 by the following vote:

FOR ADOPTION:	Brun, Kagawa, Kaneshiro, Kawakami, Yukimura, Rapozo	TOTAL – 6,
AGAINST ADOPTION:	None	TOTAL – 0,
EXCUSED & NOT VOTING:	Chock	TOTAL – 1,
RECUSED & NOT VOTING:	None	TOTAL – 0.

Līhu'e, Hawai'i
April 26, 2018



Jade K. Fountain-Tanigawa
County Clerk, County of Kaua'i

ATTEST:



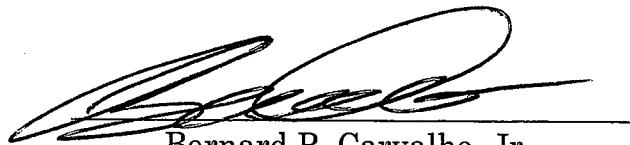
Mel Rapozo
Chairman & Presiding Officer

DATE OF TRANSMITTAL TO MAYOR:

April 26, 2018

Approved this 27th day of

April _____, 2018.



Bernard P. Carvalho, Jr.,
Mayor
County of Kaua'i

IV. Old Business

A. Discussion and Action on the Small Business
Statement After Public Hearing and Proposed
Amendments to HAR Title 4 Chapter 162, **Food
Safety Certification Costs Grant Program**,
promulgated by DOA

**SMALL BUSINESS STATEMENT "AFTER" PUBLIC HEARING
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes (HRS), §201M-3)

Department or Agency: Agriculture

Administrative Rule Title and Chapter: Chapter 4-162

Chapter Name: Food Safety Certification Costs Grant Program

Contact Person/Title: Jeri Kahana

Phone Number: 832-0705

E-mail Address: Jeri.M.Kahana@hawaii.gov

Date: July 24, 2018



A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7? Yes No

(If "Yes" please provide webpage address and when and where rules may be viewed in person.) <https://hdoa.hawaii.gov/wp-content/uploads/2013/01/Hemp-proposed-rule-Ramseyer.pdf>

(Please keep the proposed rules on this webpage until after the SBRRB meeting.)

I. Rule Description: New Repeal Amendment Compilation

II. Will the proposed rule(s) affect small business? Yes No (If "No" you do not need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit enterprise consisting of fewer than one hundred full-time or part-time employees." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance? Yes No (If "Yes" no need to submit this form.) (e.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives.) HRS §201M-2(d)

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a)) Yes No (If "Yes" no need to submit this form.)

* * *

I. Please explain how the agency involved small business in the development of the proposed rules.

a. Were there any recommendations incorporated into the proposed rules? If yes, explain. If not, why not?

II. If the proposed rule(s) affect small business, and are not exempt as noted above, please provide the following information:

1. A description of how opinions or comments from affected small businesses were solicited.
2. A summary of the public's and small businesses' comments.
3. A summary of the agency's response to those comments.
4. The number of persons who:
 - (i) Attended the public hearing:
 - (ii) Testified at the hearing:
 - (iii) Submitted written comments:
5. Was a request made at the hearing to change the proposed rule in a way that affected small business?
 - (i) If "Yes" was the change adopted? **Yes** **No**
 - (ii) If No, please explain the reason the change was not adopted and the problems or negative result of the change.

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: sbrrb@dbedt.hawaii.gov

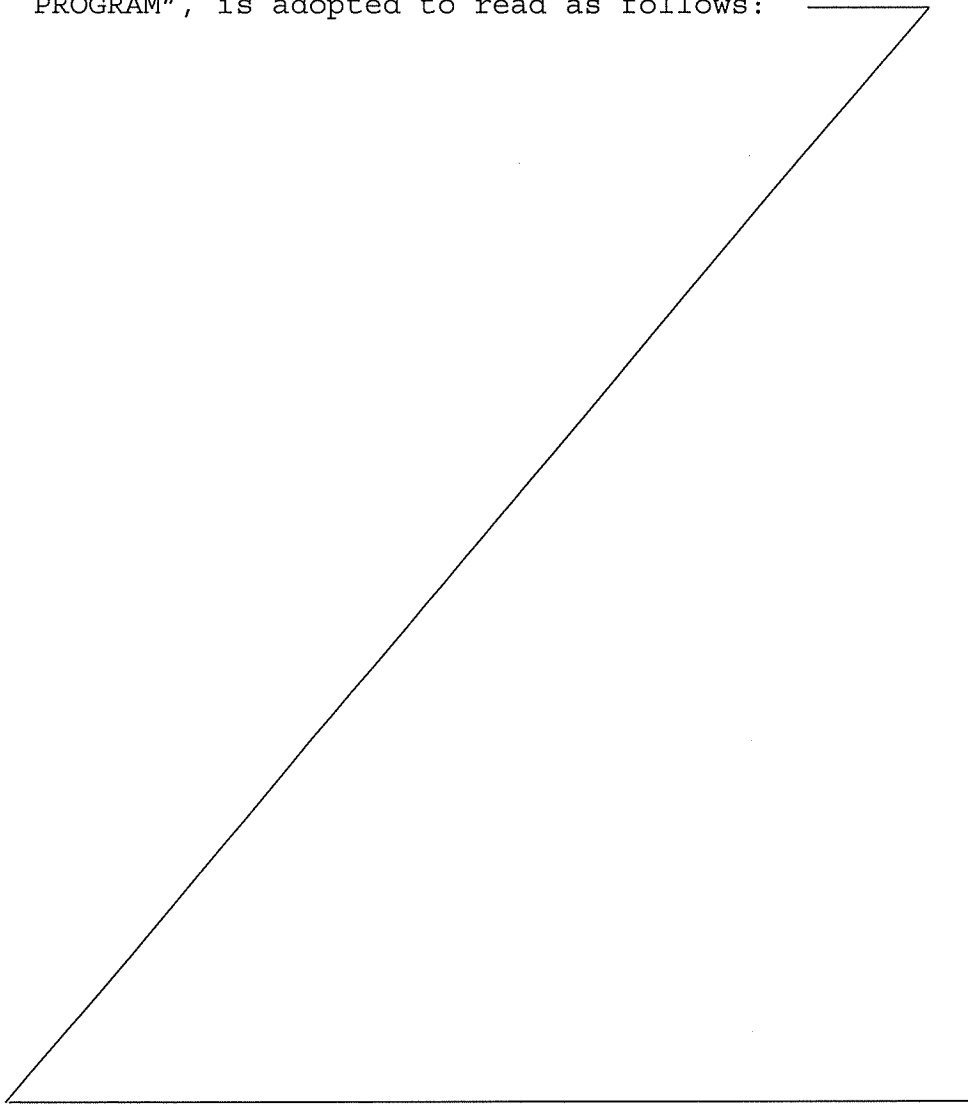
This statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb-impact-statements-pre-and-post-public-hearing>

DEPARTMENT OF AGRICULTURE

Adoption of Chapter 4-162
Hawaii Administrative Rules

<Date of Adoption>

1. Chapter 4-162, Hawaii Administrative Rules, entitled "FOOD SAFETY CERTIFICATION COSTS GRANT PROGRAM", is adopted to read as follows:



HAWAII ADMINISTRATIVE RULES

TITLE 4

DEPARTMENT OF AGRICULTURE

SUBTITLE 7

QUALITY ASSURANCE DIVISION

CHAPTER 162

FOOD SAFETY CERTIFICATION COSTS GRANT PROGRAM

§4-162-1	Definitions
§4-162-2	Purpose of program
§4-162-3	Eligibility requirements
§4-162-4	Eligible costs
§4-162-5	Ineligible costs
§4-162-6	Applications
§4-162-7	Invoicing
§4-162-8	Grant amounts

§4-162-1 Definitions. As used in this chapter:

"Department" means the department of agriculture.

"Farming or ranching" means operations that grow, harvest, and pack fresh produce; or grow, harvest, pack, and hold fresh produce; or grow, harvest, manufacture and hold livestock feed for commercial sale purposes.

"FDA" means the federal Food and Drug Administration.

"FDA regulations" means title 21 of the Code of Federal Regulations, parts 112, 112, 117, and 507.

"FSMA" means the FDA Food Safety Modernization Act (P.L. 111-353).

"Program" means the Hawaii food safety certification costs grant program.

"HRS" means the Hawaii Revised Statutes.

"Good agricultural practices and good handling practices audits" means audits performed by a third party government agency or private company to verify that fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards.

"Produce Safety Alliance" means the collaboration between Cornell University, the FDA, and the USDA to prepare fresh produce growers to meet the regulatory requirements included in the FSMA's Produce Safety Rule.

"Food Safety Preventive Controls Alliance" means the collaboration between Illinois Institute of Technology and the FDA to help industry comply with the FSMA preventive controls rules for human and animal food.

"State" means the State of Hawaii.

"State food safety laws" means chapter 321, Hawaii Revised Statutes, and chapter 11-50, Hawaii Administrative Rules.

"USDA" means the United States Department of Agriculture. [Eff _____] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

§4-162-2 Purpose of program. The purpose of the Hawaii food safety certification costs grant program is to provide grants to assist farmers or ranchers in meeting the costs of complying with the FSMA, FDA regulations, and state food safety laws.

[Eff _____] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

§4-162-3 Eligibility requirements. (a) To be eligible for a food safety certification costs grant, an applicant shall:

- (1) Be engaged in farming or ranching in the State as defined in this chapter; and
- (2) Be:
 - (A) An individual person residing in the State;

- (B) An institution of higher education in the State; or
- (C) A business entity having its principal place of business in the State with employees for whom the business is legally required to provide employee benefits.

[Eff] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

§4-162-4 Eligible costs. (a) Grants shall be awarded to reimburse costs incurred for practices necessary for compliance with the FSMA, FDA regulations, or state food safety laws.

(b) Eligible costs may include:

(1) Training

(A) Training recognized by the FDA to be equivalent to the Produce Safety Alliance's standardized curriculum;

(B) Training recognized by the FDA to be equivalent to the Food Safety Preventive Control Alliance's standardized curriculum;

(C) Training recognized by the FDA to comply with the hazard analysis and risk-based preventive controls for human foods rule;

(D) Training recognized by the FDA to comply with the hazard analysis and risk-based preventive controls for animal foods rule; and

(E) Preventive controls systems training emphasizing prevention of hazards before they occur, such as hazard analysis critical control point, or hazard analysis and risk-based preventive controls;

(2) Water systems, sanitizer treatment supplies, and monitoring meters;

(3) Microbial testing of water, raw produce, or facility;

- (4) Personal hygiene equipment and supplies, including:
 - (A) Fixed or portable restroom, but not including septic systems or sewer connections;
 - (B) Rental of portable restroom including cleaning and disposal of waste;
 - (C) Hand washing sinks;
 - (D) Hand sanitizer and sanitizing stations;
 - (E) Worker protection clothing; and
 - (F) First aid kits;
 - (5) Harvest and packing supplies to reduce food safety risks;
 - (6) Costs associated with food and safety compliance in the production of livestock feed for resale, including forage grasses, hay, grains;
 - (8) Wildlife fencing and pest deterrents and traps;
 - (9) Good agricultural practices and good handling practices audit costs with a passing score;
 - (10) General clean-up of farm and removal of hazardous debris;
 - (11) Traceability software, tools, and supplies;
 - (13) Food grade sanitizing solutions and detergents; and
 - (15) Costs of other practices necessary for compliance with the FSMA, FDA regulations, or state food safety laws.
- (c) Only costs that were incurred within five years prior to the time the application for the grant is received by the department shall be eligible for reimbursement. [Eff _____] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

§4-162-5 Ineligible costs. Costs that are not eligible for reimbursement include but are not limited to:

- (1) Costs that are not directly related to, and necessary for, compliance with the FSMA, FDA regulations, or state food safety laws;
- (2) Costs related to the general operation of the applicant's business;
- (3) Wages, compensation, or benefits for the applicant's employees;
- (4) Costs of travel, entertainment, or lobbying activities;
- (5) Costs of vehicles and related vehicle expenses;
- (6) Costs for which the applicant already has been or will be reimbursed;
- (7) Insurance costs; and
- (8) Costs incurred more than five years prior to the time the application for grant is received by the department.

[Eff] (Auth: HRS §141-12.5)
(Imp: HRS §141-12.5)

§4-162-6 Applications. (a) Each applicant for a food safety certification costs grant shall submit a signed, complete, accurate, and legible application, on a form provided by the department, and shall include the following:

- (1) The applicant's name, and business name if different, mailing address, farm or ranch's physical address, phone number, and if applicable, electronic mail address;
- (2) If the applicant is an individual or partnership, the date of birth of the individual or partners;
- (3) Proof of compliance with the State's business registration, tax, and labor laws;
- (4) A photocopy of the applicant's general excise tax license;
- (5) A completed W-9 tax information form signed by the applicant;
- (6) Evidence of the implementation of farm food safety plan and practices, including photographs of equipment and their use;

- (7) Proof of third party audit of good agricultural practices or good handling practices; and
 - (8) The applicant's agricultural operation details, including but not limited to:
 - (A) Acreage in production;
 - (B) Crops produced;
 - (C) Agricultural production experience;
 - (D) Food safety plan information;
 - (E) Farm size;
 - (F) Good agricultural practices certifications, if any;
 - (G) Applicable income categories, as specified by the FSMA; and
- (b) The application shall also include applicant's acknowledgment and agreement to the following terms and conditions:
- (1) The applicant has the legal authority to authorize, and by submitting an application does authorize, the department to enter the applicant's place of business at reasonable times to inspect records, facilities, and the premises either in the processing of the application or in the administration of the grant;
 - (2) The applicant certifies that all information and documents submitted in support of the application are correct and complete to the best of the applicant's knowledge;
 - (3) The applicant has all licenses, permits, and other approvals required by federal, state, or county governmental entities to conduct its operations and implement the practices for which the grant is intended;
 - (4) The applicant shall comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability; and
 - (5) The applicant shall allow the State full access to its records, files, and other

related documents for the purpose of measuring the effectiveness, and ensuring the proper expenditures, of the grant.

(c) The department may require additional documentation to verify compliance with this chapter. Any incomplete application for a grant shall be denied. [Eff] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

§4-162-7 Invoicing. (a) All applications shall be accompanied by invoices or receipts showing eligible costs incurred for practices necessary for compliance with the FSMA, FDA regulations, or state food safety laws.

(b) Invoices and receipts shall be original and shall include:

- (1) The date of purchase, the vendor's name, mailing address, and phone number;
- (2) An itemization of each good or service; and
- (3) Verification of payment by the applicant.

(c) The department may require additional documentation to verify compliance with this chapter. [Eff] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

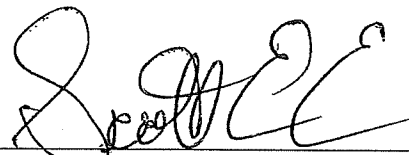
§4-162-8 Grant amounts. (a) All grants are subject to available funding.

(b) Grant awards shall be made on a reimbursement, pro-rata basis out of the funds available for food safety certification costs grants.

(c) The maximum grant amount to any one applicant in a fiscal year shall not exceed \$5,000. [Eff] (Auth: HRS §141-12.5) (Imp: HRS §141-12.5)

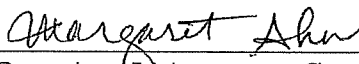
2. The adoption of chapter 4-162, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in the Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on Month xx, xxxx, and filed with Office of the Lieutenant Governor.



SCOTT E. ENRIGHT
Chairperson
Board of Agriculture

APPROVED AS TO FORM



Deputy Attorney General

IV. Old Business

B. Discussion and Action on the Small Business
Statement After Public Hearing and Proposed
Amendments to HAR Title 4 Chapter 71, **Plant and
Non-Domestic Animal Quarantine, Non-
Domestic Animal Import Rules**, promulgated by
DOA

**SMALL BUSINESS STATEMENT "AFTER" PUBLIC HEARING
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**

(Hawaii Revised Statutes (HRS), §201M-3)

Department or Agency: Department of Agriculture, Plant Quarantine Branch

Administrative Rule Title and Chapter: Title 4, Chapter 71, Hawaii Administrative Rules

Chapter Name: Plant and Non-Domestic Animal Quarantine, Non-Domestic Animal
Import Rules

Contact Person/Title: Christopher Kishimoto, Entomologist

Phone Number: (808) 832-0566

E-mail Address: christopher.m.kishimoto@hawaii.gov **Date:** July 9, 2018

- A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.
(See attachment A)

- B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7? Yes No

(If "Yes" please provide webpage address and when and where rules may be viewed in person.)

<http://hdoa.hawaii.gov/meetings-reports/proposedar/>

(Please keep the proposed rules on this webpage until after the SBRRB meeting.)

- I. **Rule Description:** New Repeal Amendment Compilation

- II. **Will the proposed rule(s) affect small business?** Yes No (If "No" you do not need to submit this form.)

The proposed rule amendment to ban the import of "dangerous wild animals" for live performance in a circus or carnival, which was opposed by small business, was not approved by the Board of Agriculture following public hearings on the proposed amendments. So, in this regard, small business will not be affected.

Small business is expected to benefit from the rule amendment allowing import of Nile tilapia, *Oreochromis niloticus*, for commercial aquaculture. Nile tilapia is currently one of the most sought after finfish for freshwater aquaculture.

- * "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit enterprise consisting of fewer than one hundred full-time or part-time employees." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance? Yes No (If "Yes" no need to submit this form.) (e.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives.) HRS §201M-2(d)

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a)) Yes No (If "Yes" no need to submit this form.)

I. Please explain how the agency involved small business in the development of the proposed rules.

The proposed rule amendment to allow import of Nile tilapia for commercial aquaculture was supported by small business entities that expressed interest in importing live Nile Tilapia (*Oreochromus niloticus*) for aquaculture and sale. These small businesses provided substantial input and participated in discussions and presented testimony at the advisory committee meetings and the November 24, 2015 and January 26, 2016, Board of Agriculture meetings on this subject.

Pursuant to section 91-3, Hawaii Administrative Rules, members of the public and members of the aquaculture community, including small businesses, gave oral and written testimony on the proposed rule amendments at public hearings held in each county in the State during the week of May 1-5, 2017.

a. Were there any recommendations incorporated into the proposed rules? If yes, explain. If not, why not?

Small businesses made no recommendations other than the proposed rule amendment to allow the importation of Nile tilapia for commercial aquaculture.

II. If the proposed rule(s) affect small business, and are not exempt as noted above, please provide the following information:

1. A description of how opinions or comments from affected small businesses were solicited.

See response under item I, above.

2. A summary of the public's and small businesses' comments.

Testimony in support of changing the list placement of Nile tilapia from the List of Restricted Animals (Part A) to the List of Restricted Animals (Part B) to allow Nile tilapia import for commercial aquaculture focused on the following: a reduced reliance on imported food, potential benefits to the aquaculture industry and State economy, and the Nile tilapia's claimed lesser invasiveness as compared to other tilapia species already established in Hawaii. Testimony against allowing Nile tilapia import for commercial aquaculture focused on concern about its potential invasiveness and potential impact on native aquatic flora and fauna if it were to escape or be released into the environment.

3. A summary of the agency's response to those comments.

HDOA did not receive any comments about the proposed amendments that required an agency response.

4. The number of persons who:

(i) Attended the public hearings:

Excluding HDOA staff, there were nineteen (19) attendees for all five hearings combined.

(ii) Testified at the hearings:

Nineteen (19) oral testimonies were received at the hearings, including from private individuals, persons testifying on behalf of state agencies such as the University of Hawaii, or Department of Land and Natural Resources, or persons testifying on behalf of environmental organizations, or public/private partnerships, and on behalf of small business. Eleven (11) attendees testified in favor of the proposed rule amendment to change the list placement of Nile tilapia to allow its import for commercial aquaculture. Four (4) attendees testified against this proposed rule amendment.

Four (4) attendees testified in favor of the proposed

rule amendment to change the list placement of house cricket (*Acheta domesticus*) to allow its import for use as feed for certain insectivorous animals at Honolulu Zoo. No one testified against this proposed rule amendment.

(iii) Submitted written comments:

A total of forty-one (41) written testimonies were received from private individuals, environmental organizations, and representatives of state agencies during the public comment period. Thirty-four individuals supported the proposed rule amendment to change the list placement of Nile tilapia to allow its import for commercial aquaculture, while seven (7) individuals submitted written testimony against this proposed rule amendment.

No written testimony was received for the proposed rule amendment to change the list placement of house crickets.

5. Was a request made at the hearing to change the proposed rule in a way that affected small business?

No change to the proposed rule amendments regarding Nile tilapia or house cricket was requested by testifiers or persons submitting written testimony at the public hearings.

(i) If "Yes" was the change adopted? **Yes** **No**

(ii) If No, please explain the reason the change was not adopted and the problems or negative result of the change.

* * *

Small Business Regulatory Review Board / DBEDT

Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb-impact-statements-pre-and-post-public-hearing>

Summary of Amendments to Chapter 4-71, Hawaii Administrative Rules, Entitled, "Non-Domestic Animal Import Rules," Relating to Import Requirements For Non-Domestic Animals

The proposed amendments to chapter 4-71, Hawaii Administrative Rules, as preliminarily approved by the Board of Agriculture (Board) on 11/24/15 and 1/26/16 are summarized below:

1. Section 4-71-1, Objectives: Adds "associated risks to animal and public health and safety" as an additional basis for restricting or prohibiting import of specific non-domestic animals.
2. Section 4-71-2, Definitions: Replaces the word "chairman" in the definition of "advisory subcommittee" with the word "chairperson" to conform to the correct term used elsewhere in chapter 4-71, HAR. Also replaces the word "municipal" in section 4-71-3.1, entitled "User permit fees", with the broader term, "government", to be consistent with amendments to section 4-71-6.5, HAR, entitled "Permitted introductions", regarding "government" zoos and "government use".
3. Section 4-71-3, Permits: Clarifies that violation of permit conditions may result in citation or in cancellation of a permit, or both.
4. Section 4-71-4.1, Maximum time period for permit approvals: Clarifies that short term special permits, as well as short-term permits for certain animals, not just for performing animals, must be processed within 120 days.
5. Section 4-71-5, Notice of quarantine: Adds "risk to animal or public health and safety" as another consequence of uncontrolled introduction of non-domestic animals, in addition to danger to agricultural and related industries.
6. Section 4-71-6.5 Permitted introductions:
 - a. Allows government agencies to import animals on the List of Conditionally Approved Animals, which includes animals allowed for import for individual possession, businesses, and institutions.
 - b. Expands the purposes for which animals on the List of Restricted Animals (Part B) may be imported, from currently allowed purposes (i.e., private and commercial use, including zoological parks, or aquaculture production) to include government use.

- c. Replaces the term “municipal” zoos with the broader term “government” zoos;
 - d. Clarifies that, in addition to universities and government agencies, other institutions may import restricted list animals for research, and that universities and government agencies may import restricted list animals for medical and scientific purposes as well as for research, as determined by the Board of Agriculture.
 - e. Clarifies that permits may be approved by the chairperson, as well as by the branch chief or Board of Agriculture, as specified by rules.
 - f. Clarifies that site approval is required prior to the issuance of any permit issued for import of animals on the restricted lists and unlisted animals.
 - g. Clarifies that the transfer or sale of unlisted animals under permit is allowed, provided the proposed transferee can satisfy conditions for transfer and obtain a permit for possession.
 - h. Deletes Nile tilapia, *Oreochromis niloticus*, from the List of Restricted Animals (Part A) and adds this fish to the List of Restricted Animals (Part B) to allow its import for aquaculture production.
 - i. Deletes house crickets, *Acheta domesticus*, from the List of Restricted Animals (Part A) and adds this insect to the List of Restricted Animals (Part B) to allow its import as feed for certain insectivorous zoo animals.
7. Section 4-71-7, Bond for certain animals: Deletes the word, "performing," to expand the bond requirement to any animal used in a circus, carnival, or commercial filming, as appropriate.

DEPARTMENT OF AGRICULTURE

Amendment and Compilation of Chapter 4-71,
Hawaii Administrative Rules

September 26, 2017

SUMMARY

1. §§4-71-1 to 4-71-3.1 are amended.
2. §4-71-4.1 is amended.
3. §4-71-5 is amended.
4. §§4-71-6.5 to 4-71-7 are amended.
5. Chapter 71 is compiled.

Summary of Amendments to Chapter 4-71, Hawaii Administrative Rules, Entitled, "Non-Domestic Animal Import Rules," Relating to Import Requirements For Non-Domestic Animals

The proposed amendments to chapter 4-71, Hawaii Administrative Rules, as preliminarily approved by the Board of Agriculture (Board) on 11/24/15 and 1/26/16 are summarized below:

1. Section 4-71-1, Objectives: Adds "associated risks to animal and public health and safety" as an additional basis for restricting or prohibiting import of specific non-domestic animals.
2. Section 4-71-2, Definitions: Replaces the word "chairman" in the definition of "advisory subcommittee" with the word "chairperson" to conform to the correct term used elsewhere in chapter 4-71, HAR. Also replaces the word "municipal" in section 4-71-3.1, entitled "User permit fees", with the broader term, "government", to be consistent with amendments to section 4-71-6.5, HAR, entitled "Permitted introductions", regarding "government" zoos and "government use".
3. Section 4-71-3, Permits: Clarifies that violation of permit conditions may result in citation or in cancellation of a permit, or both.
4. Section 4-71-4.1, Maximum time period for permit approvals: Clarifies that short term special permits, as well as short-term permits for certain animals, not just for performing animals, must be processed within 120 days.
5. Section 4-71-5, Notice of quarantine: Adds "risk to animal or public health and safety" as another consequence of uncontrolled introduction of non-domestic animals, in addition to danger to agricultural and related industries.
6. Section 4-71-6.5 Permitted introductions:
 - a. Allows government agencies to import animals on the List of Conditionally Approved Animals, which includes animals allowed for import for individual possession, businesses, and institutions.
 - b. Expands the purposes for which animals on the List of Restricted Animals (Part B) may be imported, from currently allowed purposes (i.e., private and commercial use, including zoological parks, or aquaculture production) to include government use.

- c. Replaces the term “municipal” zoos with the broader term “government” zoos;
 - d. Clarifies that, in addition to universities and government agencies, other institutions may import restricted list animals for research, and that universities and government agencies may import restricted list animals for medical and scientific purposes as well as for research, as determined by the Board of Agriculture.
 - e. Clarifies that permits may be approved by the chairperson, as well as by the branch chief or Board of Agriculture, as specified by rules.
 - f. Clarifies that site approval is required prior to the issuance of any permit issued for import of animals on the restricted lists and unlisted animals.
 - g. Clarifies that the transfer or sale of unlisted animals under permit is allowed, provided the proposed transferee can satisfy conditions for transfer and obtain a permit for possession.
 - h. Deletes Nile tilapia, *Oreochromis niloticus*, from the List of Restricted Animals (Part A) and adds this fish to the List of Restricted Animals (Part B) to allow its import for aquaculture production.
 - i. Deletes house crickets, *Acheta domesticus*, from the List of Restricted Animals (Part A) and adds this insect to the List of Restricted Animals (Part B) to allow its import as feed for certain insectivorous zoo animals.
7. Section 4-71-7, Bond for certain animals: Deletes the word, "performing," to expand the bond requirement to any animal used in a circus, carnival, or commercial filming, as appropriate.

DEPARTMENT OF AGRICULTURE

Amendment and Compilation of Chapter 4-71,
Hawaii Administrative Rules

September 26, 2017

SUMMARY

1. §§4-71-1 to 4-71-3.1 are amended.
2. §4-71-4.1 is amended.
3. §4-71-5 is amended.
4. §§4-71-6.5 to 4-71-7 are amended.
5. Chapter 71 is compiled.

Rules Amending Title 4

Hawaii Administrative Rules

September 26, 2017

1. Chapter 71 of Title 4, Hawaii Administrative Rules, entitled "Plant and Non-Domestic Animal Quarantine Non-Domestic Animal Import Rules" is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES"

TITLE 4 DEPARTMENT OF AGRICULTURE

SUBTITLE 6 DIVISION OF PLANT INDUSTRY

CHAPTER 71

PLANT AND NON-DOMESTIC ANIMAL QUARANTINE

NON-DOMESTIC ANIMAL IMPORT RULES

Subchapter 1 General Provisions

§4-71-1	Objective
§4-71-2	Definitions
§4-71-3	Permits
§4-71-3.1	User permit fees

- §4-71-4 Submission of permit application to the board
- §4-71-4.1 Maximum time period for permit approvals, disapprovals, extensions, or automatic approvals
- §4-71-4.2 Public input and notification for listing
- §4-71-4.3 Violations

Subchapter 2 Non-Domestic Animal Introductions

- §4-71-5 Notice of quarantine
- §4-71-6 Prohibited introductions
- §4-71-6.1 Ad hoc panel for identification of prohibited hybrid animal
- §4-71-6.5 Permitted introductions
- §4-71-7 Bond for certain animals
- §4-71-8 Bonding procedure
- §4-71-9 Conditions for bonding
- §4-71-10 Failure to comply with bond conditions

Historical note: Chapter 71 is based substantially upon Regulation 2 entitled "Concerning the Introduction of Feral and Other Non-Domestic Animals into Hawaii," of the Division of Entomology and Marketing, Department of Agriculture and Conservation [Eff. 12/12/41; am and ren. Regulation 2 8/30/47; am 9/16/60; R 7/13/81]; and Regulation 3 entitled "Concerning the Introduction of Bacteria, Fungi and Viruses into Hawaii," of the Division of Entomology, Board of Commissioners of Agriculture and Forestry [Eff. 12/12/41; am and ren. Regulation 3 8/30/47; R 7/13/81]

SUBCHAPTER 1

GENERAL PROVISIONS

§4-71-1 Objective. The objective of this chapter is to implement the requirements of chapter 150A, Hawaii Revised Statutes, by restricting or prohibiting the importation of specific non-domestic animals that are detrimental to the agricultural, horticultural, and aquacultural industries, natural resources and environment of Hawaii, and on the basis of associated risks to animal or public health and safety. [Eff. 7/13/81; am and comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; comp 4/06/07; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6, 150A-7)

§4-71-2 Definitions. As used in the chapter:
 "Advisory subcommittee" means one of the advisory subcommittees on entomology, invertebrate and aquatic biota, land vertebrates, algae, bacteria, fungi, protozoa, viruses, or plants appointed by the [chairman] chairperson pursuant to section 150A-10, HRS;

"Board" means the board of agriculture of the department of agriculture;

"Branch" means the plant quarantine branch;

"Chairperson" means the chairperson of the board of agriculture;

"Chief" means the chief or manager of the plant quarantine branch;

"Department" means the department of agriculture;

"Non-domestic animal" means any animal, including mammals, birds, reptiles, amphibians, fishes and invertebrates, other than domestic dog (Canis familiaris), domestic cat (Felis catus), domestic

horse (Equus caballus), domestic ass, burro, or donkey (Equus asinus), domestic cattle (Bos taurus and Bos indicus) including the beefalo (3/8 bison and 5/8 domestic cattle), domestic sheep (Ovis aries), domestic goat (Capra hircus), domestic swine (Sus scrofa domestica), domestic pot-bellied pig (Sus salvanis), domestic alpaca (Lama pacos), domestic llama (Lama glama), domesticated races of European rabbit (Oryctolagus cuniculus), domesticated races of chicken (Gallus gallus), domesticated races of turkeys (Meleagris gallopavo), domesticated races of pigeons (Columba domestica and Columba livia), domesticated races of muscovy ducks (Cairina moschata), domesticated races of greylag geese (Anser anser) and swan geese (Anser cygnoides), and domestic hybrids (crosses between two domestic animals). As used in this chapter, the term or word, "animal," shall mean "non-domestic animal";["]

"Permittee" means any person or agency that has applied for and been granted a permit for the introduction or possession of an animal under this chapter;

"Primate sanctuary" means a facility that provides permanent care, rehabilitation, and protection for donated, abandoned, or displaced primates, does not trade or sell primates for financial gain, and that maintains a 501(c) (3) not-for-profit federal tax-exempt status and any permits or licenses required by federal, state, or municipal laws; and

"Private use" means use for non-commercial purposes, such as non-profit research, and does not include individual possession of an animal as a pet. [Eff. 7/13/81; am and comp 9/19/91; am and comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6, 150A-6.2, 150A-7)

§4-71-3 Permits. (a) All importation of animals shall be by permit. A permit application shall be submitted to the chief with an appropriate bond, if required in this chapter, and the following information:

- (1) Name and address of shipper and importer, including mailing and street address;
- (2) Approximate number and kind (common and scientific name) of animal;
- (3) Sex, if determinable;
- (4) Object of importation;
- (5) Mode of transportation; and
- (6) Approximate date of arrival.

(b) The chief, without submitting the permit application to the board, may approve or disapprove the issuance of a permit based on a past board decision relating to the same species of animal and the respective conditions for importation previously established by the board for that animal species, provided that, if approved, the current import request is, in all essential respects, the same as the previously approved request and that the importer is able to comply with the previously established conditions.

(c) A permit application for an animal which was previously disapproved may be resubmitted for board action pursuant to section 4-71-4 upon determination by the chief that conditions for importation are significantly different from the previously disapproved request.

(d) A permit application for an animal allowed for import under these rules but not previously permitted entry by the board shall be submitted for board action pursuant to section 4-71-4.

(e) The chairperson, without submitting the permit application to the advisory committee on plants and animals and the board, may approve a short term permit for animals on the conditionally approved or restricted lists, or a short-term special permit for unlisted animals, not to exceed ninety days, for [performing animals] performance or exhibition in a circus, carnival, commercial filming for television or

movies, or other performance, or exhibition when it has been determined that [the]:

- (1) The animals shall be adequately safeguarded under the control of professional trainers
- (2) or handlers [, provided that the animals];
The animals are not on the list of prohibited animals, [and further provided that an];
- (3) Appropriate permit conditions are established by the board; and
- (4) [an] An appropriate bond, if applicable, is secured with the department as required by sections 4-71-7 and 4-71-8.

(f) The permittee shall comply with all permit conditions established by the board. Violation of permit conditions may result in citation as provided in section 150A-12, HRS, or in cancellation of the permit, or both. Any violation of law or rule that calls into question the permittee's fitness to hold a permit, especially the likelihood of the permittee maintaining proper security and safeguarding for animals under the permittee's other permits, may result in cancellation of the permittee's other permits as well. [Eff. 7/13/81; comp 9/19/91; am and comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.2, 150A-6.4, 150A-7)

§4-71-3.1 User permit fees. (a) A fee for the processing application and issuance of a permit is required as follows:

- (1) Five dollars per permit for a single shipment within one year from date of issuance;
- (2) Fifty dollars per permit for unlimited shipments within one year from date of issuance; and
- (3) Fees shall be paid in full at the time of

request and are non-refundable except for an appropriate bond as required in this chapter.

(b) In addition to the requirements of subsection (a) herein, a fee for a site inspection as required in this chapter and by permit conditions shall be twenty-five dollars per inspection plus mileage reimbursement.

(c) For inspections requiring the services of personnel beyond official working hours, an additional fee shall be assessed which shall include applicable charges for overtime wages, fixed charges for personnel services, and meals if required.

(d) Fees may be waived by the chief for research by not-for-profit organizations, universities, or government agencies, or for exhibition in [municipal] government zoos or government-affiliated aquariums. [Eff and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §150A-7.5)

§4-71-4 Submission of permit application to the board. (a) The applicant shall provide the chief with the following additional information:

- (1) A statement of reasons for importation;
- (2) The person responsible for the animal;
- (3) A description of safeguarded facilities;
- (4) The method of disposition;
- (5) An abstract of the animal; and
- (6) Any other pertinent documented information as required by the branch on the proposed introduction.

(b) The applicant shall provide an adequate number of copies of the application and attachments as requested by the chief.

(c) The chief shall compile the information submitted by the applicant and send it to the members of the appropriate advisory subcommittee(s) for review.

(d) The comments and recommendations of the advisory subcommittee(s) shall be compiled and sent to the advisory committee on plants and animals for review.

(e) The comments and recommendations of the advisory subcommittee(s), the advisory committee on plants and animals, including the committee's votes, and of the chief shall be compiled and submitted to the board at its regular scheduled meeting.

(f) The board shall take action to approve or disapprove the permit application. The board may impose permit conditions including but not limited to, health requirements, safeguarding the animal from escape, unauthorized release, or theft, as well as any applicable requirements of municipal, state, or federal law. [Eff. 7/13/81; comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.2, 150A-6.4, 150A-7)

§4-71-4.1 Maximum time period for permit approvals, disapprovals, extensions, or automatic approvals.

(a) Pursuant to the requirements of chapter 91, HRS, the department shall establish the following maximum time periods for the processing of permit requests after acceptance of a completed permit application and payment of applicable fees pursuant to sections 4-71-3 and 4-71-3.1:

- (1) For same species of animals with respective conditions for importation previously established by the board, the chief may approve or disapprove the issuance of a permit within 90 days;
- (2) For certain [performing] animals in a circus, carnival, or commercial filming for television or movies, or other performance or exhibition, and with an appropriate bond secured with the department for each animal, the chairperson, without submitting the

permit application to the board, may approve or disapprove a short term permit or short-term special permit within 120 days;

- (3) For a permitted animal enumerated in section 4-71-6.5 that requires board action pursuant to section 4-71-4 to amend or establish permit conditions, the chief may approve or disapprove the issuance of a permit within 180 days; and
- (4) For an animal not previously permitted entry, excluding those animals enumerated in section 4-71-6, an application request must be submitted for board action pursuant to section 4-71-4 and subject to public input and notification for listing under section 4-71-4.2 or as provided by section 150A-6.2, HRS, the chief may approve or disapprove the issuance of a permit within one year.

(b) Notwithstanding the requirements of subsection (a) herein, the maximum period of time shall be extended indefinitely in the event of a national disaster, state emergency, or union strike, which prevents the department from fulfilling application or review requirements in a timely manner.

(c) Except as provided for in subsection (b), an application request for the issuance of a permit shall be given automatic approval if action is not taken by the department within the established maximum period of time as specified in subsection (a). After the expiration of the maximum time period is brought to the attention of the department; the department shall have a reasonable amount of time to issue the permit. This section shall apply only to application requests for business or development-related permits required by law to be obtained prior to the formation, operation, or expansion of a commercial or industrial enterprise. [Eff and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; am and comp] (Auth: HRS §§91-13.5, 141-2, 150A-9) (Imp: HRS §§91-13.5, 150A-6.2)

§4-71-4.2 Public input and notification for listing. (a) By order, the board may adopt additions to or deletions from the lists of animals without regard to the notice and public hearing requirements of chapter 91, HRS, provided that thirty days or more prior to the effective date of the order, the department shall issue a press release and mail notices to the Office of Environmental Quality Control for publication and to all persons who have made a timely written request of the department for advance notice of the order or the department's rulemaking proceedings. The press release and the notice shall include:

- (1) A statement summarizing the substance of the proposed order which may include examples of the kinds of animals being added to or deleted from the lists required under section 150A-6.2, HRS;
- (2) A statement that a copy of the proposed order and the proposed exact changes will be mailed to any interested person who requests a copy upon payment in advance of costs for photocopying, preparing, and mailing the copy;
- (3) A statement as to where to obtain a copy of the proposed order and the proposed exact changes for inspection, or for pick-up after payment in full of costs for photocopying and preparing; and
- (4) A statement that the department is soliciting comments regarding the proposed order during the next thirty days, where comments may be forwarded to, and where the proposed order will be discussed.

(b) The department shall consider all oral and written comments and may incorporate the same in its review of the proposed order by the advisory committee on plants and animals in a noticed, public meeting.

(c) Upon approval by the board at a noticed, public meeting, the order to adopt additions to or deletions from the lists of animals shall take effect ten days after the department gives public notice of

the order in a daily or weekly publication of statewide circulation or in separate daily or weekly publications whose combined circulation is statewide. [Eff and comp 8/16/99; am and comp 11/30/01; comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §150A-6.6)

§4-71-4.3 Violations. Any person who violates any provision or requirement of this chapter or of any notice given pursuant thereto, shall be subject to the penalties provided for under section 150A-14, HRS. [Eff and comp 8/16/99; comp 11/30/01; comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.4, 150A-14)

SUBCHAPTER 2

NON-DOMESTIC ANIMAL INTRODUCTIONS

§4-71-5 Notice of quarantine. The board finds that there exists serious danger to the agricultural, horticultural, and aquacultural industries, natural resources, and environment of Hawaii, risk to animal or public health and safety, by the uncontrolled introduction of feral and other non-domestic animals. [Eff. 7/13/81; comp 9/19/91; comp 2/21/92; comp 9/13/93; comp 1/30/95; am and comp 8/16/99; comp 11/30/01; comp 4/06/07; am and comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6, 150A-6.2, 150A-7)

§4-71-6 Prohibited introductions. (a) The introduction into Hawaii of live animals or live

non-domestic animals as defined in this chapter at any stage of development is prohibited except for those animals on the lists incorporated in §4-71-6.5, by permit, and except as provided by section 150A-6.2, HRS.

(b) The list of animals designated as prohibited entry pursuant to section 150A-6.2, HRS, dated November 28, 2006, and located at the end of this chapter is made a part of this section. No person shall introduce into Hawaii any animal from the list of prohibited animals. [Eff. 7/13/81; am and comp 9/19/91; am and comp 2/21/92; am and comp 9/13/93; am and comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; comp]
(Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.2, 150A-7)

§4-71-6.1 Ad hoc panel for identification of Ad hoc panel for identification of prohibited hybrid animal.

(a) The chairperson shall establish an ad hoc panel of no fewer than three members with applicable expertise in vertebrate biology to determine if an animal is a prohibited hybrid animal when the branch suspects that the lineage of the animal is not as stated by the owner or on other official documents.

(b) The ad hoc panel shall review all pertinent information including, but not limited to, expert consultations, health and pedigree certificates, owner's statements, branch findings, or viewings of the animal, to determine lineage of a suspect prohibited hybrid animal.

(c) After its review and determination the ad hoc panel shall report its findings to the branch, and appropriate action shall be taken by the branch on the disposition of the suspect hybrid prohibited animal.

(d) In any contested case arising out of the identification of a suspected hybrid animal, the method of identification selected by the ad hoc panel shall not be overturned absent evidence of actual bias

on the part of one or more of the ad hoc panel members or unless the method of identification lacks a scientific basis. [Eff and comp 8/16/99; comp 11/30/01; comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6, 150A-6.2)

§4-71-6.5 Permitted introductions. (a) The introduction into Hawaii of live animals or live non-domestic animals as defined in this chapter is only allowed:

- (1) For those animals on the list designated as conditionally approved and dated November 28, 2006, or on the list designated as restricted entry, dated [November 28, 2006] September 26, 2017, pursuant to section 150A-6.2, HRS, both of which lists are located at the end of this chapter and made a part of this section;
- (2) By permit approved by the board, chairperson, or chief, as appropriate, pursuant to sections 4-71-3 and 4-71-4; and
- (3) After securing appropriate bond for certain animals pursuant to sections 4-71-7, 4-71-8, and 4-71-9.

(b) Pursuant to the requirements of subsection (a) herein, the introduction of animals on the lists of conditionally approved or restricted animals is allowed as follows:

- (1) Animals on the list of conditionally approved animals, for individual possession, businesses, government agencies, or institutions;
- (2) Animals on Part A of the list of restricted animals, for research, medical or scientific purposes as determined by the board, by universities, [or] government agencies, or other institutions approved by the board, for exhibition in [municipal] government zoos or government-affiliated aquariums, [for other institutions for medical or

scientific purposes as determined by the board], or for other purposes as specified in this chapter; and

- (3) Animals on Part B of the list of restricted animals, for the purposes described in subsection (b)(2) herein or for government use, or private and commercial use, including research, zoological parks, or aquaculture production, except that animals in the order Primates shall not be allowed for import or possession for private or commercial use other than for purposes described in subsection (b)(2) or for primate sanctuaries, as determined by the board.

(c) The introduction of unlisted animals for the purpose of remediating medical emergencies or agricultural or ecological disasters, or conducting scientific research that is not detrimental to agriculture, the environment, or humans is allowed for import and possession by a special permit on a case-by-case basis, if the importer can meet permit requirements or other guidelines as determined by the board pursuant to section 150A-6.2, HRS.

(d) The introduction of unlisted animals for the purpose of filming, performance, or exhibition is allowed by short-term special permit on a case-by-case basis not to exceed 90 days for importation and possession if the importer can meet permit and bonding requirements as determined by the board pursuant to section 150A-6.2, HRS.

(e) The permittee shall obtain [prior] site approval prior to the issuance of a permit for animals on the list of restricted animals and for unlisted animals [under special permit] as determined by the board.

(f) Restricted list animals and unlisted animals [under special permit as determined by the board] require a permit for both import and possession. Where a permit for a restricted list animal or an unlisted animal allows transfer or sale, the proposed transferee shall first obtain a permit for possession

of the imported animal by application to the chief, site inspection approval, and [satisfaction of] shall satisfy any bond or other requirements applicable.

(g) The board may establish permit conditions including but not limited to, time, place, location, use, special precautions, health requirements, and safeguarding the animal from escape, unauthorized release, or theft, as well as any applicable requirements of municipal, state, or federal laws. The permittee shall comply with the requirements of this chapter, chapter 150A, HRS, and specific permit conditions established by the board. [Eff. and comp 2/21/92; am and comp 9/13/93; am and comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; am and comp] (Auth: §§141-2, 150A-9) (Imp: HRS §150A-6.2)

§4-71-7 Bond for certain animals. The applicant shall secure an appropriate bond, as specified in this chapter, for the following:

- (1) Monkeys, apes, baboons, chimpanzees, gibbons, lemurs, pottos, wallabies, and any other animal that the board or chairperson may require to be bonded as a condition for importation or possession;
- (2) Any offspring of bonded animals; and
- (3) Certain [performing] animals in a circus, carnival, commercial filming for television or movie productions, or other performance or exhibition under short-term or short-term special permit that have been permitted entry by the chairperson without advisory committee review and board action pursuant to section 4-71-3(e), or certain unlisted animals that have been permitted entry by the board under special permit pursuant to section 150A-6.2, HRS. [Eff. 7/13/81; am and comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07;

§4-71-8

am and comp] (Auth:
HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.2,
150A-7)

§4-71-8 Bonding procedure. (a) When required in this chapter, the bonding of animals shall be by cashier's check, or cash secured with the department.

(b) An appropriate individual bond shall be secured with the department for the sum of three thousand dollars for each animal except as provided for in subsection (c).

(c) An appropriate individual bond shall be secured with the department for the sum of two thousand dollars for each animal for owners holding valid United States Department of Agriculture licenses under the Animal Welfare Act.

(d) A cashier's check or cash secured with the department as a bond, shall be returned to the owner without interest, upon verification of the death or exportation of the animal, or the transfer or sale of the animal to a new owner who has secured the necessary bond and permit in advance of the transfer.

(e) Government organizations, such as municipal zoos, and animal sanctuaries determined by the United States Internal Revenue Service to be not-for-profit entities are exempt from the bonding requirements of this section. [Eff. 7/13/81; am and comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 11/30/01; am and comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9)
(Imp: HRS §§150A-6.2, 150A-7)

§4-71-9 Conditions for bonding. An owner, dealer, or organization shall import and maintain bonded animals under the following conditions:

- (1) The owner, dealer, or organization shall submit information to the chief with respect

- to the number, sex, if determinable, and species of animal;
- (2) The animal shall be kept in captivity and as required by permit conditions at all times;
 - (3) The chief shall be notified immediately upon the escape of any bonded animal;
 - (4) The chief shall be notified immediately upon the death of the bonded animal and the carcass shall be presented immediately to the state veterinarian or his designate for examination and verification;
 - (5) Out-of-state movement of a bonded animal shall be verified by an inspector in advance of the movement and after prior arrangements for verification have been made with the chief;
 - (6) An animal may be sold or given away in Hawaii only to persons who have secured an appropriate bond with and acquired a permit from the department prior to the sale or transfer;
 - (7) A bond or cashier's check in the appropriate amount required under section 4-71-8 shall be kept in full force and effect;
 - (8) The owner, dealer, or organization shall report to the chief the birth of and secure an appropriate bond and permit for any offspring within thirty calendar days of the birth;
 - (9) The owner, dealer, or organization shall report to the chief any change of mailing address and related contact information within seven business days of the change; and
 - (10) The owner, dealer, or organization possessing a valid United States Department of Agriculture license under the Animal Welfare Act shall report to the chief any suspension, revocation, or expiration of the required federal license within seven business days of the license status change. [Eff. 7/13/81; am and comp 9/19/91; comp

§4-71-10

2/21/92; comp 9/13/93; comp 1/30/95; am and
comp 8/16/99; am and comp 4/06/07;
comp] (Auth: HRS §§141-2,
150A-9) (Imp: HRS §§150A-6.2, 150A-7)

§4-71-10 Failure to comply with bond conditions.

(a) The department may seize the bonded animal, and foreclose on the bond or retain such sums secured by cash or cashier's check upon failure of the owner to comply with the bonding conditions in section 4-71-9.

(b) Should the bonded animal escape, the owner shall take necessary action to recapture the animal. If the owner fails to recapture the animal within one week after escape or when the animal becomes a nuisance or poses a serious threat to the community, the department may employ its resources to recapture the animal after due notice to the owner. The owner shall be held responsible for the cost incurred by the department.

(c) Any bonded animal that is captured after escape or seized pursuant to section 4-71-10 may be sold at a private sale, shipped out state, donated to a government agency, or destroyed no sooner than fifteen days after cancellation of the bond." [Eff 7/13/81; am and comp 9/19/91; comp 2/21/92; am and comp 9/13/93; comp 1/30/95; am and comp 8/16/99; am and comp 4/06/07; comp] (Auth: HRS §§141-2, 150A-9) (Imp: HRS §§150A-6.2, 150A-7)

2. Material, except source notes, to be repealed is bracketed. New material is underscored.

3. Additions to update source notes to reflect these amendments and compilation are not underscored.

4. These amendments to and compilation of chapter 4-71, Hawaii Administrative Rules, shall take

effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on September 26, 2017 and filed with the Office of the Lieutenant Governor.

SCOTT E. ENRIGHT
Chairperson, Board of
Agriculture

APPROVED AS TO FORM:

Deputy Attorney General

LIST OF PROHIBITED ANIMALS

November 28, 2006

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
INVERTEBRATES	
PHYLUM Annelida CLASS Polychaeta ORDER Phyllodocida FAMILY Glyceridae <u>Glycera americana</u>	bloodworm
PHYLUM Arthropoda CLASS Crustacea ORDER Decapoda FAMILY Coenobitidae <u>Coenobita clypeatus</u>	crab, land hermit
FAMILY Potamidae Potamidae (all species in family)	crabs, freshwater
CLASS Insecta ORDER Hymenoptera FAMILY Apidae <u>Apis mellifera</u>	bee, honey (alive or dead)
ORDER Lepidoptera FAMILY Tortricidae <u>Cydia deshaisiana</u>	moth, Mexican jumping bean
PHYLUM Cnidaria CLASS Cubozoa ORDER Cubomedusae FAMILY Chirodropidae Chirodropidae (all species in family)	jellyfishes

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
PHYLUM Mollusca CLASS Bivalvia ORDER Veneroida FAMILY Corbiculidae <u>Corbicula fluminea</u>	clam, freshwater (shijimi)

CLASS Cephalopoda ORDER Octopoda FAMILY Octopobidae <u>Octopus maculosus</u> <u>Octopus maya</u>	octopus, Australian octopus
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AMPHIBIANS

PHYLUM Chordata CLASS Amphibia ORDER Caudata FAMILY Amphiumidae <u>Amphiuma</u> (all species in genus)	salamanders
FAMILY Proteidae <u>Necturus</u> (all species in genus)	salamanders
FAMILY Sirenidae <u>Pseudobranchius striatus</u> <u>Siren intermedia</u> <u>Siren lacertina</u>	salamander, dwarf siren, lesser siren, greater
ORDER Salientia (Anura) FAMILY Dendrobatidae <u>Phyllobates</u> (all species in genus)	frogs
FAMILY Hylidae <u>Hyla septentrionalis</u>	treefrog, Cuban
FAMILY Pipidae Pipidae (all in family, except the following species for research and exhibition by government agencies: <u>Pipa pipa</u> (toad, surinam) and <u>Xenopus laevis</u> (frog, African clawed))	

SCIENTIFIC NAMECOMMON NAME

REPTILES

CLASS Reptilia

ORDER Squamata

Serpentes (all species in suborder, except for two male nonvenomous snakes for exhibition in a government zoo, and for four sterile male brown tree snakes, Boiga irregularis, for research or training of snake detector dogs by the department)

snakes

FAMILY Helodermatidae

Heloderma sp.

gila monster

FISHES

CLASS Chondrichthyes

ORDER Carcharhiniformes

FAMILY Carcharhinidae

Carcharhinus nicaraguensisshark, Nicaraguan
freshwater

ORDER Myliobatiformes

FAMILY Dasyatidae

Dasyatidae (all species in family)

stingrays, freshwater

ORDER Orectolobiformes

FAMILY Orectolobidae

Orectolobus maculatusshark, spotted carpet;
(shark, wobbegong)Orectolobus ornatus

shark, banded carpet

ORDER Petromyzoniformes

FAMILY Petromyzonidae

Petromyzonidae (all species in family)

lampreys

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
CLASS Osteichthyes ORDER Amiiformes FAMILY Amiidae Amiidae (all species in family)	bowfins; dogfishes; mudfishes
ORDER Anguilliformes Anguilliformes (all species in order)	eels
ORDER Atheriniformes FAMILY Atherinidae <u>Atherinomorus stipes</u>	silversides, hardhead
FAMILY Belonidae Belonidae (all species in family)	needlefishes
FAMILY Hemirhamphidae Hemirhamphidae (all species in family, except <u>Dermogenys pusillus</u> and <u>Nomorhamphus celebensis</u>)	halfbeaks
FAMILY Poeciliidae <u>Belonesox belizanus</u>	top minnow, pike
ORDER Cypriniformes FAMILY Characidae <u>Acestrorhynchus</u> (all species in genus)	cachorros
<u>Catoprion</u> (all species in genus)	piranha
<u>Hydrolycus</u> (all species in genus)	characins
<u>Pygocentrus</u> (all species in genus)	piranha
Serrasalminae (all species in subfamily except the species in the following genera: <u>Colossoma</u> , pacu; <u>Metynnis</u> , silver dollar; <u>Myleus</u> , silver dollar; <u>Myloplus</u> , myloplus; and <u>Mylossoma</u> , pacu)	piranha
<u>Serrasalmo</u> (all species in genus)	piranha
<u>Serrasalmus</u> (all species in genus)	piranha

PROHIBITED ANIMAL LIST

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<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Gymnotidae <u>Electrophorus electricus</u>	eel, electric
ORDER Myctophiformes FAMILY Synodontidae <u>Synodus</u> (all species in genus)	lizard fishes
ORDER Osteoglossiformes FAMILY Osteoglossidae <u>Arapaima gigas</u>	pirarucu
ORDER Perciformes FAMILY Channidae Channidae; (Ophiocephaloidae) (all species in family, except <u>Ophiocephalus striatus</u>)	snake heads
FAMILY Cichlidae <u>Batrachops</u> (all species in genus) <u>Crenicichla</u> (all species in genus)	cichlid, pike cichlid, pike
FAMILY Eleotrididae <u>Dormitator maculatus</u> <u>Eleotris</u> (all species in genus) <u>Mogurnda mogurnda</u>	sleeper, spotted sleepers gudgeon, purple striped
FAMILY Sciaenidae <u>Pogonias cromis</u> <u>Sciaenops ocellatus</u>	drum, black drum, red
FAMILY Sparidae <u>Pagrus major</u>	bream, red sea
ORDER Polypteriformes FAMILY Polypteridae Polypteridae (all species in family)	fishes, bichir
ORDER Scorpaeniformes FAMILY Scorpaenidae <u>Amblyapistus taenianotus</u> <u>Dendrochirus zebra</u> <u>Inimicus didactylum</u> <u>Paracentropogon longispinis</u> <u>Pterois</u> (all species in genus) <u>Scorpaena</u> (all species in genus)	rouge fish lion fish, zebra sea goblin, popeyed scorpion fish, wispy lion fishes scorpion fishes

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Scorpaenodes</u> (all species in genus)	scorpion fishes
<u>Synanceia horrida</u>	stone fish
<u>Synanceia verrucosa</u>	stone fish
<u>Taenianotus triacanthus</u>	leaf fish, sailfin
ORDER Semionotiformes	
FAMILY Lepisosteidae	
Lepisosteidae (all species in family)	garpikes
ORDER Siluriformes	
FAMILY Ariidae	
Ariidae (all species in family)	catfishes, ariid
FAMILY Bagridae	
<u>Bagrichthys hypselopterus</u>	catfish, black lancer
<u>Clarotes</u> (all species in genus)	catfishes, clarotes
FAMILY Clariidae	
Clariidae (all species in family, except <u>Clarias fuscus</u>)	catfishes
FAMILY Doradidae	
Doradidae (all species in family)	catfishes, doradid
FAMILY Malapteruridae	
<u>Malapterurus electricus</u>	catfish, electric
FAMILY Pimelodidae	
<u>Phractocephalus hemiliopterus</u>	catfish, redtailed
<u>Pseudopimelodus transmontanus</u>	catfish, Peruvian mottled
<u>Pseudoplatystoma fasciatum</u>	catfish, tiger shovelnose
FAMILY Plotosidae	
Plotosidae (all species in family)	eels, catfish
FAMILY Siluridae	
<u>Wallago attu</u>	catfish, helicopter
FAMILY Trichomycteridae	
<u>Vandellia cirrhosa</u>	candiru

SCIENTIFIC NAMECOMMON NAME

ORDER Synbranchiformes	
FAMILY Synbranchidae	
<u>Synbranchus afer</u>	moray, freshwater
<u>Synbranchus marmoratus</u>	moray, freshwater

BIRDS

(Taxonomy after Sibley and Monroe 1990)

CLASS Aves	
ORDER Apodiformes	
FAMILY Trochilidae	
Trochilidae (all species in family, except sexually dimorphic males for exhibition in government zoos only)	hummingbirds
ORDER Columbiformes	
FAMILY Columbidae	
<u>Alectroenas</u> (all species in genus)	pigeons, fruit
<u>Cryptophaps</u> (all species in genus)	pigeons, fruit
<u>Drepanopila</u> (all species in genus)	doves, fruit
<u>Gymnophaps</u> (all species in genus)	pigeons, fruit
<u>Hemiphaga</u> (all species in genus)	pigeons, fruit
<u>Lopholaimus</u> (all species in genus)	pigeons, fruit
<u>Phapitreron</u> (all species in genus)	doves, fruit brown
<u>Sphenurus</u> (all species in genus)	pigeons, fruit
<u>Treron</u> (all species in genus)	pigeons, green fruit
ORDER Galliformes	
FAMILY Cracidae	
<u>Crax alector</u>	curassow, crested
<u>Crax rubra</u>	curassow, greater (Mexican)
FAMILY Tetraonidae	
<u>Bonasa umbellus umbellus</u>	grouse, ruffed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Passeriformes	
FAMILY Coerebidae	
Coerebidae (all species in family)	honeycreepers
FAMILY Corvidae	
<u>Corvus brachyrhynchos</u>	crow, common
<u>Corvus cornix</u>	crow, hooded
<u>Corvus corone</u>	crow, carrion
<u>Corvus frugilegus</u>	crow, rook
<u>Pica</u> (all species in genus)	magpies
FAMILY Dicaeidae	
<u>Dicaeum</u> (all species in genus)	flowerpeckers
FAMILY Emberizidae	
<u>Emberiza citrinella</u>	bunting, yellow (yellow hammer)
FAMILY Estrildidae	
<u>Aegintha temporalis</u>	finch, Sydney waxbill (redbrowed)
<u>Chloropsis hardwickii</u>	chloropsis, Hardwick's (orangebellied)
<u>Estrilda subflava subflava</u> (Females only)	finch, goldbreasted (orangebreasted)
<u>Lagonosticta rara</u>	finch (waxbill), blackbellied fire
<u>Lonchura castaneothorax</u>	finch, chestnut breasted
<u>Lonchura striata</u>	mannikin, striated; (munia, white back)
<u>Mandingoa nitidula</u>	finch, greenbacked twinspace
<u>Padda oryzivora</u>	sparrow, Java (white and gray)
<u>Poephila cincta cincta</u>	finch, parson blackthroated
<u>Poephila personata</u>	finch, masked
<u>Spermophaga haematina</u>	finch, bluebill
<u>Steganopleura guttata</u>	finch, diamond; (sparrow, diamond)
FAMILY Fringillidae	
<u>Cardinalis phoeniceus</u>	cardinal, vermilion
<u>Carduelis chloris</u>	greenfinch European
<u>Fringilla coelebs</u>	chaffinch
<u>Pyrenestes sanguineus</u>	finch, seedcracker (crimson)
<u>Pyrrhula pyrrhula (=europosa)</u>	bullfinch, common
<u>Sporophila torqueola</u>	finch, whitecollared seedeater
<u>Zonaeginthus bellus</u>	finch, firetail

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Ibididae <u>Hesperiphona</u> (all species in genus)	sugarbirds
FAMILY Icteridae <u>Turdus merula</u> <u>Turdus viscivorus</u>	black bird, European thrush, mistle
FAMILY Meliphagidae Meliphagidae (all species in family)	honeyeaters
FAMILY Nectariniidae Nectariniidae (all species in family)	sunbirds
FAMILY Oriolidae <u>Gymnomystax melanicterus</u>	oriole, northern South American
FAMILY Ploceidae <u>Foudia madagascariensis</u> <u>Passer domesticus</u> <u>Ploceus philippinus</u>	weaver, Madagascar fody sparrow, house weaver baya
FAMILY Pycnonotidae <u>Pycnonotus</u> (all species in genus) <u>Hysipetes</u> (all species in genus)	bulbuls bulbuls
FAMILY Sturnidae <u>Acridotheres</u> (all species in genus) <u>Gracupica nigricollis</u> <u>Sturnus</u> (all species in genus, except the following one species for exhibition in government zoos only: <u>Sturnus nigricollis</u> (starling, black collared)	mynas myna, blacknecked (blackheaded) starlings
FAMILY Thraupidae Thraupidae (all species in family, except males only of the following three species for exhibition in government zoos only: <u>Piranga olivacea</u> (tanager, scarlet); <u>Ramphocelus dimidiatus</u> (tanager,	tanagers

SCIENTIFIC NAMECOMMON NAME

crimson-backed); Thraupis
episcopus (tanager, blue-grey))

FAMILY Zosteropidae
Zosterops erythropleura

white eye, chestnutflanked

ORDER Piciformes

FAMILY Rhamphastidae

Rhamphastidae (all in family, except the following nine species for exhibition in government zoos only: Pteroglossus beauharnaesii (aracari, curlcrested); Rhamphastos ambiguus swainsonii (toucan, bicolor); Ramphastos toco cuvieri (toucan, Cuvier's); Ramphastos discolorus (toucan, redbreasted); Ramphastos sulfuratus sulfuratus (toucan, sulfurbreasted); Ramphastos toco toco (toucan, toco); Ramphastos vitellinus ariel (toucan, ariel); Ramphastos vitellinus vitellinus (toucan, sulphur and white breasted); and Selenider maculirostris (toucanet, spot-billed)

ORDER Psittaciformes

FAMILY Loriidae

Loriidae (all in family, except the following nine species for exhibition in government zoos only: Chalcopsitta sintillata (lory, streaked); Eos bornea (lory, red); Eos squamata (lory, velvetnecked); Charmosyna papou golinthina (lory, Stella's); Lorius lory (lory, blackcapped); Trichoglossus haematodus (lory, rainbow); Trichoglossus johnstoniae (lorikeet, Johnstone's); Trichoglossus ribiginosus (lory, Ponape); and Vini peruviana (lory, Tahitian))

FAMILY Psittacidae

<u>Aratinga nana astec</u>	parrot, Aztec dwarf; (conure, Aztec)
<u>Bolbopsittacus lunulatus</u>	parakeet, guaiabero
<u>Brotogeris chrysopterus</u>	parakeet, goldenwinged
<u>Brotogeris pyrrhopterus</u>	parakeet, greycheeked
<u>Brotogeris sanctithomae</u>	parrot, bee bee; (Tui)
<u>Brotogeris versicolorus</u>	parakeet, canarywinged
<u>Forpus</u> (all species in genus)	parrolets; (dwarf, parrot)
<u>Loriculus</u> (all in genus, except the following two species for exhibition in government zoos only: <u>Loriculus galgulus</u> (parrot, bluecrowned); and <u>Loriculus philippensis</u> (parrot, Philippine hanging))	
<u>Micropsitta</u> (all species in genus)	parrots, pygmy; (dwarf, parrot)
<u>Myiopsitta monachus</u>	parakeet, monk (quaker)
<u>Opsittia</u> (all species in genus)	parrots, fig

SCIENTIFIC NAMECOMMON NAME

Pionites leucogaster
Pionites melanocephala

caique, whitebellied
 caique, blackheaded

MAMMALS

PHYLUM Chordata
 (crosses with prohibited
 species)

animals, hybrid; (all
 hybrid-crosses where one
 or both parents are
 prohibited)

Canis familiaris crossed
 with wolf, coyote, dingo,
 jackal, fox, dhole, African
 wild dog, racoon dog, bush dog,
 etc.

dog, hybrid; (all hybrid-
 crosses where one or both
 parents are prohibited or
 restricted)

Felis catus crossed with
 lynx, ocelot, margay,
 puma, jaguarandi, bobcat,
 leopard cat, wild cat, etc.

cat, hybrid; (all hybrid-
 crosses where one or both
 parents are prohibited or
 restricted)

CLASS Mammalia

ORDER Chiroptera

Chiroptera (all species
 in order)

bats

FAMILY Pteropodidae

Pteropus (all species in
 genus)

foxes, flying

ORDER Lagomorpha

FAMILY Leporidae

Lepus (all species in
 genus)

hares, wild

ORDER Rodentia

FAMILY Cricetidae

Cricetidae (all in family, except the following five species for
 research by government agencies only: Cricetulus griseus (mouse,
 Chinese); Gerbillus gerbillus (gerbil); Mesocricetus auratus
 (hamster); Meriones unguiculatus (gerbil); and Sigmondon hispidus
 (rat, cotton))

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Erethizontidae	
<u>Chaetomys subspinosus</u>	porcupine, thin-spined
<u>Coendou</u> (all species in genus)	porcupines, prehensile-tailed
<u>Echinoprocta rufescens</u>	porcupine
FAMILY Hystricidae	
<u>Atherurus</u> (all species in genus)	porcupines, brush-tailed
<u>Hystrix</u> (all in genus, except following species for exhibition in government zoos only: <u>Hystrix cristata</u> (porcupine, African crested))	
<u>Thecurus</u> (all species in genus)	porcupines
<u>Trichys</u> (all species in genus)	porcupines, long-tailed
FAMILY Sciuridae	
Sciuridae (all in family, except the following two species for exhibition in government zoos only: <u>Callosciurus prevosti</u> (squirrel, prevost's) and <u>Sciurus variegatoides</u> (squirrel, variegated) and except all species in the genus <u>Marmota</u> for research in government universities only)	

LIST OF CONDITIONALLY APPROVED
ANIMALS

November 28, 2006

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>	
INVERTEBRATES		
PHYLUM Annelida CLASS Oligochaeta ORDER Plesiopora FAMILY Tubificidae <u>Tubifex</u> (all species in genus)		worm, tubifex
PHYLUM Arthropoda CLASS Crustacea ORDER Anostraca FAMILY Artemiidae <u>Artemia</u> (all species in genus)		shrimp, brine
ORDER Cladocera FAMILY Daphnidae <u>Daphnia</u> (all species in genus)		flea, water
ORDER Decapoda FAMILY Atelecyclidae <u>Erimacrus isenbeckii</u>		crab, horsehair
FAMILY Cancridae <u>Cancer antennarius</u> <u>Cancer anthonyi</u> <u>Cancer borealis</u> <u>Cancer magister</u> <u>Cancer productus</u>		crab, California rock crab, yellowstone crab, Jonah crab, dungeness crab, rock (red)
FAMILY Geryonidae <u>Geryon affinis</u>		crab, golden
FAMILY Lithodidae <u>Paralithodes camtschatica</u>		crab, Alaskan king
FAMILY Majidae <u>Chionocetes bairdi</u> <u>Chionocetes opilio</u>		crab, snow crab, snow

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Chionocetes tanneri</u>	crab, snow
FAMILY Nephropidae	
<u>Homarus</u> (all species in genus)	lobster, true
FAMILY Palaemonidae	
<u>Macrobrachium lar</u>	shrimp, freshwater
<u>Macrobrachium rosenbergi</u>	prawn, giant long-legged
FAMILY Palinuridae	
<u>Jasus</u> (all species in genus)	crayfish, saltwater; lobster
<u>Panulirus argus</u>	lobster, Atlantic spiny
<u>Panulirus longipes femoristriga</u>	crayfish, saltwater
<u>Panulirus pencillatus</u>	lobster, spiny
FAMILY Portunidae	
<u>Callinectes sapidus</u>	crab, blue
<u>Scylla serrata</u>	crab, Samoan; serrate, swimming
FAMILY Raninidae	
<u>Ranina ranina</u>	crab, spanner; red frog, Hawaiian
CLASS Insecta	
ORDER Coleoptera	
FAMILY Tenebrionidae	
<u>Tenebrio molitor</u>	mealworm, yellow
ORDER Diptera	
FAMILY Drosophilidae	
<u>Drosophila melanogaster</u>	fly, pomace
PHYLUM Cnidaria	
CLASS Hydrozoa	
ORDER Hydroida	
FAMILY Hydridae	
<u>Hydra</u> (all species in genus)	hydra

CONDITIONAL ANIMAL LIST

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SCIENTIFIC NAME

COMMON NAME

PHYLUM Echinodermata

CLASS Echinoidea

ORDER Echinoida

FAMILY Strongylocentrotidae

Strongylocentrotus drobachiensis

sea urchin

Strongylocentrotus franciscanus

sea urchin

Strongylocentrotus purpuratus

sea urchin

CLASS Holothuroida

ORDER Dactylochirotida

FAMILY Stichopodidae

Stichopus californicus

sea cucumber

Stichopus japonicus

sea cucumber, Japanese

PHYLUM Mollusca

CLASS Bivalvia

ORDER Myoida

FAMILY Hiatellidae

Panope generosa

clam, king (geoduck)

FAMILY Myidae

Mya arenaria

clam, soft shell

ORDER Mytiloida

FAMILY Mytilidae

Mytilus edulis

mussel, sea

Mytilus edulis galloprovincialis

mussel, Mediterranean

Perna canaliculus (viridis)

mussel, green lipped

ORDER Ostreoida

FAMILY Ostreidae

Crassostrea (all species in genus)

oyster

Ostrea (all species in genus)

oyster

FAMILY Pectinidae

Argopecten irradians

scallops, bay

Chlamys hastata

scallop, spiny

Chlamys rubida

scallop, pink

Pecten caurinus

scallop, weathervane

CONDITIONAL ANIMAL LIST

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SCIENTIFIC NAME

COMMON NAME

ORDER Veneroida	
FAMILY Cultellidae	
<u>Siliqua patula</u>	clam, razor
FAMILY Mactridae	
<u>Mactromeris polynyma</u>	clam, Stimpson's surf
<u>Spisula solidissima</u>	clam, east coast surf
<u>Tresus capax</u>	clam, horse
<u>Tresus nuttalli</u>	clam, horse
FAMILY Mesodesmatidae	
<u>Paphies australis</u>	clams, New Zealand pipi
<u>Paphies donacina</u>	clam, tuatua
<u>Paphies subtriangulata</u>	clams, tuatua
FAMILY Veneridae	
<u>Chione stutchburyi</u>	cockle, New Zealand
<u>Mercenaria mercenaria</u>	clam, littleneck
<u>Tapes semidecussata</u>	clam
<u>Venerupis japonicus</u>	clam
<u>Venus mercenaria</u>	clam, quahog
CLASS Gastropoda	
ORDER Archaeogastropoda	
FAMILY Haliotidae	
<u>Haliotis</u> (all species in genus)	abalone
ORDER Basommatophora	
FAMILY Lymnaeidae	
<u>Radix auricularia</u>	snail, European freshwater
FAMILY Physidae	
<u>Physa</u> (all species in genus)	snail, freshwater
FAMILY Planorbidae	
<u>Helisoma</u> (all species in genus)	snail, ramshorn
<u>Planorbis</u> (all species in genus)	snail, ramshorn
ORDER Mesogastropoda	
FAMILY Littorinidae	
<u>Littorina palliata</u>	periwinkle; snail, sea

SCIENTIFIC NAME

COMMON NAME

FAMILY Strombidae
Strombus gigas

conch, queen

FAMILY Viviparidae
Cipangopaludina chinensis

snail, Chinese freshwater

PHYLUM Nemata (=Nematoda)

CLASS Secernentea

ORDER Rhabditida

FAMILY Rhabditidae

Caenorhabditis elegans

nematode

FAMILY Steinernematidae

Steinernema carpocapsae

nematode, entomogenous

PHYLUM Platyhelminthes

CLASS Trematoda

ORDER Plagiorchiida

FAMILY Dicrocoeliidae

Dicrocoelium dentriticum

trematode

CLASS Turbellaria

ORDER Tricladida

FAMILY Planariidae

Planaria

planaria

PHYLUM Rotifera

CLASS Monogononta

ORDER Ploima

Family Brachionidae

Brachionus (all species in genus)

rotifer

SCIENTIFIC NAMECOMMON NAME

AMPHIBIANS

PHYLUM Chordata

CLASS Amphibia

ORDER Caudata

FAMILY Ambystomidae

Ambystoma annulatum

salamander, ringed

Ambystoma maculatum

salamander, spotted

Ambystoma mexicanum

axolotl

Ambystoma opacum

salamander, marbled

Ambystoma talpoideum

salamander, mole

Ambystoma tigrinum

salamander, tiger

FAMILY Plethodontidae

Plethodon cinereus

salamander, red-backed

Plethodon dorsalis

salamander, zigzag

Plethodon dunni

salamander, Dunn's

Plethodon elongatus

salamander, Del Norte

Plethodon glutinosus

salamander, slimy

Plethodon jordani

salamander, Jordan's

Plethodon vehiculum

salamander, western

red-backed

Pseudotriton montanus

salamander, mud

Pseudotriton ruber

salamander, red

FAMILY Salamandridae

Cynops pyrrhogaster

newt, Japanese fire-bellied

Salamandra atra

salamander, Alpine

Salamandra salamandra

salamander, fire

Taricha granulosa

newt, rough-skinned

Taricha rivularis

newt, red-bellied

Taricha torosa

newt, California

Triturus alpestris

newt, Alpine

Triturus cristatus

newt, northern crested

Triturus helveticus

newt, palmate

Triturus marmoratus

newt, marbled

Triturus montandoni

newt, Carpathian

Triturus vittatus

newt, banded

Triturus vulgaris

newt, smooth

ORDER Salientia

FAMILY Hylidae

Hyla andersoni

treefrog, pine barrens

Hyla arenicolor

treefrog, canyon

Hyla avivoca

treefrog, bird-voiced

Hyla cadaverina

treefrog, California

SCIENTIFIC NAME

COMMON NAME

<u>Hyla chrysoscelis</u>	treefrog, Cope's gray
<u>Hyla cinerea</u>	treefrog, green
<u>Hyla crucifer</u>	treefrog, spring peeper
<u>Hyla eximia</u>	treefrog, mountain
<u>Hyla femoralis</u>	treefrog, pine woods
<u>Hyla gratiosa</u>	treefrog, barking
<u>Hyla regilla</u>	treefrog, Pacific
<u>Hyla squirella</u>	treefrog, squirrel
<u>Hyla versicolor</u>	treefrog, gray

FAMILY Ranidae

<u>Rana aurora</u>	frog
<u>Rana boylei</u>	frog
<u>Rana catesbeiana</u>	frog, American bullfrog
<u>Rana clamitans</u>	frog, American green
<u>Rana esculenta</u>	frog, edible
<u>Rana nigromaculatus</u>	frog
<u>Rana pipiens</u>	frog, leopard
<u>Rana ridibunda</u>	frog, marsh
<u>Rana rugosa</u>	frog, wrinkled
<u>Rana septentrionalis</u>	frog, mink
<u>Rana sylvatica</u>	frog, wood
<u>Rana temporaria</u>	frog, Eurasian common

REPTILES

PHYLUM Chordata

CLASS Reptilia

ORDER Testudines

FAMILY Emydidae

<u>Chinemys megalocephala</u>	turtle, big headed pond
<u>Chrysemys (Pseudemys) (all species in genus except C. alabamensis and C. rubriventris)</u>	turtle, painted; sliders
<u>Clemmys (all species in genus)</u>	turtle, pond
<u>Cuora yunnanensis</u>	turtle, Asian box
<u>Deirochelys reticularia</u>	turtle, chicken
<u>Emydoidea blandingi</u>	turtle, Blanding's
<u>Emys orbicularis</u>	turtle, European pond
<u>Graptemys (all species in genus except G. oculifera)</u>	turtle, map
<u>Mauremys (Clemmys) caspica</u>	turtle, Caspian pond
<u>Mauremys (Clemmys) japonica</u>	turtle, Japanese pond
<u>Mauremys (Clemmys) leprosa</u>	turtle, Iberian pond

SCIENTIFIC NAMECOMMON NAME

Mauremys (Clemmys) mutica
Terrapene (all species in genus
 except T. coahuila)

turtle, Taipei pond
 turtle, box

FAMILY Testudinidae

Asterochelys (all species in
 genus except A. radiata and
A. yniphora)
Chelonoidis (all species in
 genus except C. elephantopus)
Chersina angulata
Geochelone (all species in genus)
Gopherus (Xerobates) (all
 species in genus except
G. agassizi, G. flavomarginatus,
 and G. polyphemus)

tortoise

tortoise, Galapagos

tortoise, bow-sprit

tortoise

tortoise, gopher

Homopus areolatus
Homopus boulengeri
Homopus femoralis
Homopus signatus
Megalochelys (all species in
 genus)
Psammobates oculifer
Psammobates tentorius
Pyxis (Acinixys) planicauda
Testudo (all species in genus)

tortoise, parrot-beaked

tortoise, donner-weer

tortoise, karroo

tortoise, speckled

tortoise

tortoise, serrated

geometric

tortoise, knobby geometric

tortoise, flat-back spider

tortoise, European

FISHES

PHYLUM Chordata

CLASS Osteichthyes

ORDER Atheriniformes

FAMILY Anablepidae

Anableps anableps

four-eyes

Jenynsia lineata

livebearer, one-sided

FAMILY Atherinidae

Allanetta harringtonensis

silversides, reef

Atherinosoma wallacei

hardyhead, western

Bedotia geayi

rainbow, Madagascar

Craterocephalus cuneiceps

hardyhead, Murchison River

Craterocephalus dalhousiensis

hardyhead, Dalhousie

Craterocephalus lacustris

hardyhead, Lake Kutubu

SCIENTIFIC NAME

COMMON NAME

Craterocephalus majoriae
Craterocephalus randi
Craterocephalus
stercusmuscarum
Quirichthys stramineus
Telmatherina ladigesi

hardyhead, Marjorie's
 hardyhead, Kubuna River
 hardyhead, fly-specked

 strawman (blackmast)
 silversides, cebebes

FAMILY Cyprinodontidae

Addamas formosus
Adinia xenica
Aphanius cypris
Aphanius dispar
Aphanius fasciatus
Aphanius iberus
Aphanius mento
Aphanius sophiae
Aphyosemion abacinum
Aphyosemion ahli
Aphyosemion amieti
Aphyosemion amoenum
Aphyosemion arnoldi
Aphyosemion australe
Aphyosemion batesil
Aphyosemion bertholdi
Aphyosemion bivittatum
Aphyosemion bochtleri
Aphyosemion bualanum
Aphyosemion calliurum
Aphyosemion cameronense
Aphyosemion celliae
Aphyosemion chaytori
Aphyosemion christyi
Aphyosemion cinnamomeum
Aphyosemion coeruleum
Aphyosemion cognatum
Aphyosemion cyanostictum
Aphyosemion elegans
Aphyosemion exiguum
Aphyosemion filamentosum
Aphyosemion fulgens
Aphyosemion gardneri

Aphyosemion georgiae
Aphyosemion geryi
Aphyosemion guineense
Aphyosemion gulare
Aphyosemion herzogi

panchax, starhead
 killifish, diamond
 minnow
 minnow, log-fin Arabian
 minnow, banded
 minnow, Spanish
 minnow, Persian
 killifish
 killie
 killie, Ahl's lyretail
 killie
 killie
 killie, Arnold's lyretail
 lyretail
 killie
 killie, Berthold's
 lyretail
 killie
 killie, African swamp
 lyretail
 lyretail
 killie
 killie, Chaytor's
 killie, Christy's lyretail
 killie, cinnamon
 gularis, blue; lyretail
 killie, red spotted
 killifish, blue-spotted
 killie
 killie
 lyretail, Togo
 killie
 lyretail; steel-blue
 aphyosemion
 killie
 killie, Gery's
 killie, Guinean
 lyretail
 killie

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Aphyosemion joergenscheeli</u>	killie
<u>Aphyosemion labarrei</u>	killie, Labarre's
<u>Aphyosemion liberiense</u>	killie, Liberian
<u>Aphyosemion marmoratum</u>	killifish, marbled
<u>Aphyosemion melanopteron</u>	killie
<u>Aphyosemion mirabile-traudeae</u>	killie, azure
<u>Aphyosemion ndianum</u>	killie, red-tail
<u>Aphyosemion occidentalis</u>	killie, golden pheasant
<u>Aphyosemion oeseri</u>	killie
<u>Aphyosemion petersi</u>	killie, yellow-eyed
<u>Aphyosemion seymouri</u>	killie, Seymour's
<u>Aphyosemion sjoestedti</u>	lyretail; blue gularis
<u>Aphyosemion splendopleuris</u>	lyretail
<u>Aphyosemion splendum</u>	killie
<u>Aphyosemion striatum</u>	killie, five-lined
<u>Aphyosemion walkeri</u>	killie, Walker's
<u>Aplocheilichthys flavipinnis</u>	lampeye, yellow-finned
<u>Aplocheilichthys katangae</u>	lampeye, katanga
<u>Aplocheilichthys loemensis</u>	lampeye, loeme
<u>Aplocheilichthys macrophthalmus</u>	lampeye, bigeye
<u>Aplocheilichthys meylburgi</u>	lampeye
<u>Aplocheilichthys myersi</u>	lampeye, Myer's
<u>Aplocheilichthys pumilus</u>	lampeye, Tanganyika
<u>Aplocheilichthys schoelleri</u>	lampeye, Egyptian
<u>Aplocheilichthys spilauchen</u>	lampeye, banded
<u>Aplocheilus blocki</u>	panchax, dwarf (green)
<u>Aplocheilus dayi</u>	panchax, Day's (Singhalese)
<u>Aplocheilus javanicus</u>	panchax
<u>Aplocheilus latipes</u>	panchax
<u>Aplocheilus lineatus</u>	panchax, lineatus (striped)
<u>Aplocheilus panchax</u>	panchax, blue
<u>Austrofundulus dolichopterus</u>	killie, sicklefin (saberfin)
<u>Austrofundulus myersi</u>	killie, Myer's
<u>Austrofundulus transilis</u>	killifish, Venezuelan
<u>Chriopeodes pengelleyi</u>	pupfish, Jamaican
<u>Chriopeops goodei</u>	killifish, bluefin
<u>Cubanichthys cubensis</u>	minnow, Cuban
<u>Cynolebias boitonei</u>	lyretail, Brazilian
<u>Cynolebias adloffii</u>	pearl fish, banded
<u>Cynolebias alexandri</u>	pearl fish, entre rios
<u>Cynolebias antenori</u>	pearl fish, red-finned
<u>Cynolebias bellottii</u>	pearl fish, Argentine
<u>Cynolebias brucei</u>	gaucho, Turner's
<u>Cynolebias constanciae</u>	pearlfish, featherfin

SCIENTIFIC NAMECOMMON NAME

<u>Cynolebias dolichopterus</u>	killie, sicklefin
<u>Cynolebias ladigesi</u>	gaucho, ladiges
<u>Cynolebias melanotaenia</u>	gaucho, fighting
<u>Cynolebias minimus</u>	gaucho, Myer's
<u>Cynolebias nigripinnis</u>	pearl fish, black-finned
<u>Cynolebias viarius</u>	pearl fish, blue
<u>Cynolebias whitei</u>	pearl fish, White's
<u>Cynolebias wolterstorffi</u>	pearl fish, Wolterstorff's
<u>Cyprinodon macularis</u>	pupfish, desert
<u>Cyprinodon nevadensis</u>	pupfish, amargosa
<u>Epiplatys annulatus</u>	killie, clown
<u>Epiplatys barmoiensis</u>	panchax
<u>Epiplatys bifasciatus</u>	panchax
<u>Epiplatys chaperi chaperi</u>	panchax, Chaper's
<u>Epiplatys chaperi sheljuzhkoii</u>	panchax, Sheljuzhko's
<u>Epiplatys chevalieri</u>	panchax, Chevalier's
<u>Epiplatys dageti</u>	panchax, red-chinned
<u>Epiplatys dageti monroviae</u>	killie, Arnold's
<u>Epiplatys fasciatus</u>	epiplatys, banded
<u>Epiplatys fasciolatus</u>	panchax, striped
<u>Epiplatys grahami</u>	panchax, Graham's
<u>Epiplatys huberi</u>	killifish, Huber's
<u>Epiplatys lamottei</u>	panchax
<u>Epiplatys longiventralis</u>	panchax, banded
<u>Epiplatys macrostigma</u>	panchax, spotted
<u>Epiplatys multifasciatus</u>	panchax
<u>Epiplatys nigricans</u>	epiplatys, black-edged
<u>Epiplatys sexfasciatus</u>	panchax, six-banded
<u>Epiplatys singa</u>	panchax
<u>Epiplatys spilargyreus</u>	panchax
<u>Fundulus chrysotus</u>	minnow, golden ear (top)
<u>Fundulus cingulatus</u>	minnow, banded top
<u>Fundulus heteroclitus</u>	killie, zebra; mummichog
<u>Fundulus notatus</u>	killifish, blackstripe
<u>Fundulus notti</u>	minnow, star-head (masked)
<u>Garmanella pulchra</u>	pupfish, Yucatan
<u>Hylopanchax stictopleuron</u>	livebearer
<u>Hypsopanchax catenatus</u>	livebearer
<u>Hypsopanchax platysternus</u>	livebearer
<u>Jordanella floridae</u>	flagfish, American
<u>Lamprichthys tanganicus</u>	killie, Tanganyika pearl
<u>Leptolucania ommata</u>	killifish, swamp pygmy
<u>Lucania goodei</u>	killifish, bluefin
<u>Nothobranchius</u> (all species in genus)	killifish
<u>Oryzias celebensis</u>	medaka, celebes
<u>Oryzias javanicus</u>	rice fish, Javanese

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Oryzias latipes</u>	medaka
<u>Pachypanchax homalonotus</u>	panchax, green
<u>Pachypanchax playfairi</u>	panchax, Playfair's
<u>Plataplochilus loemensis</u>	livebearer
<u>Plataplochilus miltotaenia</u>	livebearer
<u>Plataplochilus ngaensis</u>	livebearer
<u>Procatopus aberrans</u>	lampeye, green
<u>Procatopus nototaenia</u>	killie, blue lady
<u>Pseudoxiphophorus bimaculatus</u>	swordtail, false
<u>Pterolebias longipinnis</u>	longfin, common
<u>Pterolebias peruensis</u>	longfin, Peruvian
<u>Pterolebias wischmann</u>	pterolebias, Wischmann's
<u>Pterolebias zonatus</u>	killie, lace-fin (banded longfin)
<u>Rivulus agilae</u>	rivulus, agila
<u>Rivulus amphoreus</u>	rivulus, guianas
<u>Rivulus atratus</u>	rivulus, butterfly
<u>Rivulus beniensis</u>	rivulus, reticulated
<u>Rivulus compressus</u>	rivulus, blue
<u>Rivulus cylindraceus</u>	rivulus, Cuban
<u>Rivulus harti</u>	rivulus, Hart's (giant)
<u>Rivulus holmiae</u>	rivulus, golden trail
<u>Rivulus isthmensis</u>	rivulus
<u>Rivulus limoncochae</u>	rivulus, Rio Napo
<u>Rivulus magdalenae</u>	rivulus, magdalena (bar-tailed)
<u>Rivulus milesi</u>	rivulus, yellowtail
<u>Rivulus ocellatus</u>	rivulus
<u>Rivulus ornatus</u>	rivulus, red-flecked
<u>Rivulus peruanus</u>	rivulus, perimparoo
<u>Rivulus punctatus</u>	rivulus, spotted
<u>Rivulus roloffii</u>	rivulus, Roloff's
<u>Rivulus santensis</u>	rivulus, Santos
<u>Rivulus strigatus</u>	rivulus
<u>Rivulus urophthalmus</u>	rivulus, golden
<u>Rivulus xanthonotus</u>	rivulus
<u>Rivulus xiphidius</u>	rivulus, band-tailed
<u>Roloffia bertholdi</u>	panchax
<u>Roloffia chaytori</u>	killie, Chaytor's
<u>Roloffia geryi</u>	panchax
<u>Roloffia liberiensis</u>	panchax, blue lyretail
<u>Roloffia monroviae</u>	panchax
<u>Roloffia occidentalis</u>	pheasant, golden
<u>Roloffia petersi</u>	panchax, Peter's
<u>Roloffia roloffii</u>	panchax
<u>Roloffia toddi</u>	panchax
<u>Trigonectes balzanii</u>	rivulichthys

SCIENTIFIC NAME

COMMON NAME

Trigonectes strigabundus

panchax, Brazilian false

FAMILY Goodeidae

Chapalichthys paradalis

goodeid polka-dot

Characodon lateralis

goodeid, rainbow

Goodea atripinnis

goodea, black-fin

Neotoca bilineata

neotoca, two-lined

Skiffia bilineata

goodeid

Xenotoca eiseni

goodeid, red-tailed

Zoogoneticus quitzeensis

goodeid, picotee

FAMILY Hemirhamphidae

Dermogenys pusillus

halfbeak, Malayan

Nomorhamphus celebensis

halfbeak, celes

FAMILY Melanotaeniidae

Melanotaeniidae (all species
in family)

rainbowfish

FAMILY Poeciliidae

Alfaro cultratus

livebearer, knife

Brachyrhaphis episcopi

bishop

Brachyrhaphis terrabensis

livebearer, upland

Gambusia affinis

mosquito fish

Gambusia affinis holbrooki

gambusia, Holbrook's

Gambusia puncticulata

gambusia, blue

Girardinus metallicus

girardinus, the

Glaridichthys talcatus

yellow belly

Heterandria bimaculatus

swordtail, false

Heterandria formosa

mosquito fish (killifish,
least)

Lebistes reticulata

guppy

Limia tricolor

limia

Limia caudofasciata

limia, blue

Limia negrofasciatus

limia, ornate

Limia vittata

limia, banded

Micropoecilia branneri

livebearer, Branner's

Mollienisia caucana

molly, cauca

Mollienisia formosa

molly

Mollienisia latipinna

molly, sailfin

Mollienisia latipunctata

molly

Mollienisia sphenops

molly, sphenops

Mollienisia velifera

molly, Yucatan (sailfish)

Phallichthys amates

merry widow

Phallichthys isthmensis

tooth-carp

Phalloceros caudomaculatus

caudo

Platypoecilus maculatus

moonfish, platy

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Platypoecilus variatus</u>	variatus
<u>Poecilia caucana</u>	molly, cauca
<u>Poecilia caudofasciata</u>	poecilia, blue
<u>Poecilia heterandria</u>	limia, dwarf
<u>Poecilia latipinna</u>	molly, sailfin
<u>Poecilia melanogaster</u>	limia, blue (black-bellied)
<u>Poecilia mexicana</u>	molly, Mexican shortfin
<u>Poecilia nigrofasciata</u>	limia, humpbacked
<u>Poecilia ornata</u>	limia, ornate
<u>Poecilia parae</u>	livebearer, two-spot
<u>Poecilia petensis</u>	molly, spiketail
<u>Poecilia reticulata</u>	guppy
<u>Poecilia sphenops</u>	molly, sphenops
<u>Poecilia velifera</u>	molly, Yucatan sailfish
<u>Poecilia vittata</u>	limia, banded
<u>Poecilia vivipara</u>	livebearer, one-spot
<u>Poeciliopsis gracilis</u>	livebearer, porthole
<u>Poecilistes pleurospilus</u>	livebearer, porthole
<u>Priapella intermedia</u>	livebearer, blue-eyed
<u>Quintana atrizona</u>	livebearer, black-bared
<u>Xiphophorus clemenciae</u>	swordtail, yellow
<u>Xiphophorus couchianus</u>	platy, Monterey
<u>Xiphophorus evelynae</u>	platy, puebla
<u>Xiphophorus helleri</u>	swordtail
<u>Xiphophorus maculatus</u>	platy, moonfish
<u>Xiphophorus montezumae</u>	swordtail, Mexican
<u>Xiphophorus pygmaeus</u>	swordtail, pygmy
<u>Xiphophorus variatus</u>	platy, sunset (variatus)
<u>Xiphophorus xiphidium</u>	platy, spiked-tailed
FAMILY Pseudomugilidae	
Pseudomugilidae (all species in family)	rainbowfish
ORDER Beryciformes	
FAMILY Anomalopidae	
Anomalopidae (all species in family)	lanterneye fish
FAMILY Holocentridae	
Holocentridae (all species in family)	squirrelfish
FAMILY Monocentrididae	
Monocentrididae (all species in family)	pinecone fish

SCIENTIFIC NAMECOMMON NAME

ORDER Clupeiformes	
FAMILY Clupeidae	
<u>Harengula clueola</u>	pilchard, flase
<u>Harengula humeralis</u>	sardine, reदार
FAMILY Engraulididae	
<u>Anchoa lyolepsis</u>	anchovy, dusky
ORDER Cypriniformes	
FAMILY Alestidae	
<u>Lepidarchus adonis</u>	adonis
FAMILY Anostomidae	
<u>Anostomus anostomus</u>	headstander, striped
<u>Anostomus faciatus</u>	anostomus
<u>Anostomus garmani</u>	anostomus, gray-lined
<u>Anostomus gracilis</u>	anostomus, four-spot
<u>Anostomus plicatus</u>	anostomus, black
<u>Anostomus proximus</u>	anostomid banded
<u>Anostomus taeniatus</u>	headstander, lisa
<u>Anostomus ternetzi</u>	anostomus
<u>Anostomus trimaculatus</u>	headstander, three-spot
<u>Leporinus agassizi</u>	leporinus, half-striped
<u>Leporinus arcus</u>	leporinus, lipstick
<u>Leporinus fasciatus</u>	leporinus, banded
<u>Leporinus frederici</u>	leporinus, Frederick's
<u>Leporinus jamesi</u>	leporinus, James's
<u>Leporinus maculatus</u>	leporinus, spotted
<u>Leporinus melanopleura</u>	leporinus, spot-tailed
<u>Leporinus multifasciatus</u>	leporinus, multi-banded
<u>Leporinus nigrotaeniata</u>	leporinus
<u>Leporinus octofasciatus</u>	leporinus, eight-banded
<u>Leporinus pearsoni</u>	leporinus, Pearson's
<u>Leporinus pellegrini</u>	leporinus, pellegrini
<u>Leporinus striatus</u>	leporinus, striped
<u>Prochilodus insignis</u>	prochilodus
<u>Prochilodus nigricans</u>	small-mouth, spotted
<u>Prochilodus ortonianus</u>	prochilodus, gray
<u>Prochilodus taeniurus</u>	prochilodus, silver
<u>Prochilodus theraponura</u>	flag tail
FAMILY Catostomidae	
<u>Erimyzon sucetta</u>	chubsucker, lake
<u>Myxocyprinus asiaticus</u>	suckers, Asian

SCIENTIFIC NAMECOMMON NAME

FAMILY Characidae

<u>Acuticurimata macrops</u>	characin, hooked-nosed
<u>Alestes chaperi</u>	characin, Chaper's
<u>Alestes longipinnis</u>	tetra, long-finned African
<u>Alestes nurse</u>	tetra, nurse
<u>Alestes taeniurus</u>	characin (tetra, African)
<u>Alestopetersius caudalus</u>	characin, yellow-tailed African
<u>Anoptichthys jordani</u>	cavefish, blind
<u>Aphyocharax alburnus</u>	aphyocharax, golden-crowned
<u>Aphyocharax anisitsi</u>	tetra, bloodfin
<u>Aphyocharax axelrodi</u>	pristella, red
<u>Aphyocharax dentatus</u>	bloodfin, false
<u>Aphyocharax erythrurus</u>	tetra, flame-tail
<u>Aphyocharax gracilis</u>	tetra
<u>Aphyocharax megalamphodus</u>	tetra, calypso
<u>Aphyocharax nattereri</u>	tetra
<u>Aphyocharax paraguayensis</u>	tetra, Rio Paraguay
<u>Aphyocharax pusillus</u>	tetra
<u>Aphyocharax rathbuni</u>	bloodfin, Rathburn's
<u>Aphyocharax rubripinnis</u>	bloodfin
<u>Arnoldichthys spilopterus</u>	characin, Arnold's (red-eye)
<u>Asiphonichthys condei</u>	tetra, glass
<u>Asiphonichthys unifasciatus</u>	tetra, transparent
<u>Astyanax bimaculatus</u>	astyanax, two-spotted
<u>Astyanax daguae</u>	astyanax, plain-tailed
<u>Astyanax fasciatus</u>	astyanax, banded (tetra)
<u>Astyanax fasciatus mexicanus</u>	tetra, blind cave
<u>Astyanax gymnogonys</u>	astyanax, one-spot
<u>Astyanax kennedyi</u>	astyanax, Kennedy's
<u>Astyanax mexicanus</u>	astynax
<u>Astyanax mutator</u>	astynax; punkay
<u>Astyanax poetzschkei</u>	astynax
<u>Astyanax ruberrimus</u>	astynax
<u>Astyanax zonatus</u>	astyanax, false Kennedy
<u>Axelrodia lindeae</u>	tetra, lindy
<u>Axelrodia riesei</u>	tetra, ruby
<u>Bario steindachneri</u>	bario, blotch-tailed
<u>Bathethiops fowleri</u>	moonfish, African
<u>Boehlkea fredcochui</u>	tetra, Cochu's blue
<u>Brycinus chaperi</u>	characin, Chaper's (green)
<u>Brycinus longipinnis</u>	tetra, long-fin African
<u>Brycinus nurse</u>	tetra, nurse
<u>Brycinus taeniurus</u>	tetra, narrow-lined African

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<u>Bryconamericus loisae</u>	piaco peixe
<u>Bryconops caudomaculatus</u>	tetra, red cross
<u>Bryconops melanurus</u>	anchovy, jumping
<u>Chalceus macrolepidotus</u>	chalceus, pink-tailed
<u>Chalcinus elongatus</u>	hatchetfish, elongated
<u>Characidium fasciatum</u>	characidium, banded
<u>Characidium rachovi</u>	characidium
<u>Charax gibbosus</u>	headstander, glass
<u>Cheirodon arnoldi</u>	tetra
<u>Cheirodon axelrodi</u>	tetra, cardinal
<u>Cheirodon innesi</u>	tetra, neon
<u>Cheirodon insignis</u>	tetra, insignificant
<u>Cheirodon kriegi</u>	tetra, three-spot
<u>Cheirodon leuciscus</u>	tetra
<u>Cheirodon meinkeni</u>	tetra
<u>Cheirodon piaba</u>	tetra
<u>Chilodus punctatus</u>	headstander, spotted
<u>Coelurichthys microlepis</u>	tetra, croaking
<u>Coelurichthys tenuis</u>	tetra, tenius
<u>Colossoma bidens</u>	pacu, red-bellied
<u>Colossoma brachypomum</u>	pacu, black
<u>Colossoma oculus</u>	pacu, red-finned
<u>Copeina arnoldi</u>	tetra, splashing
<u>Copeina callolepis</u>	copeina, spotted
<u>Copeina guttata</u>	copeina, red-spotted
<u>Copella arnoldi</u>	characin, jumping (splash)
<u>Copella eigenmanni</u>	copella, Eigenmann's
<u>Copella metae</u>	pyrrhulina, black-banded
<u>Copella nattereri</u>	copella, spotted
<u>Copella vilmae</u>	copella, rainbow
<u>Corynopoma riisei</u>	characin, swordtailed
<u>Creagrutus beni</u>	tetra, benny
<u>Creagrutus cochui</u>	tetra, cochui
<u>Cretochanes caudomaculatus</u>	tetra, tail-spot
<u>Crenuchus spilurus</u>	tetra, sailfin
<u>Ctenobrycon spilurus</u>	tetra, silver
<u>Distichodus affinis</u>	distichodus, silver
<u>Distichodus altus</u>	moonfish
<u>Distichodus antonni</u>	moonfish
<u>Distichodus fasciolatus</u>	distichodus, shark-tailed
<u>Distichodus lusosso</u>	distichodus, long-nosed
<u>Distichodus noboli</u>	distichodus, nobol
<u>Distichodus notospilus</u>	distichodus red-finned
<u>Distichodus rostratus</u>	moonfish
<u>Distichodus sexfasciatus</u>	distichodus, six-barred
<u>Exodon paradoxus</u>	tetra, bucktooth
<u>Gephyrocharax atracaudatus</u>	silvertail

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Gephyrocharax caucanus</u>	tetra, arrowhead
<u>Glandulocauda inequalis</u>	tetra, croaking
<u>Gymnocorymbus ternetzi</u>	tetra, black
<u>Gymnocorymbus thayeri</u>	tetra, straight-fin black
<u>Hasemania marginata</u>	tetra
<u>Hasemania nana</u>	tetra, silver-tipped
<u>Hemigrammopetersius caudalis</u>	tetra, yellow-tailed Congo
<u>Hemigrammopetersius intermedius</u>	tetra, short-finned Congo
<u>Hemigrammopetersius rhodesiensis</u>	tetra, Rhodesian
<u>Hemigrammus armstrongi</u>	tetra, gold
<u>Hemigrammus barrigone</u>	tetra, Henn's meta pink
<u>Hemigrammus bellottii</u>	tetra, dash-dot
<u>Hemigrammus boesemani</u>	tetra, Boeseman's
<u>Hemigrammus caudovittatus</u>	tetra, Buenos Aires
<u>Hemigrammus coeruleus</u>	tetra, coerulean
<u>Hemigrammus erythrozonus</u>	tetra, glowlight
<u>Hemigrammus gracilis</u>	tetra, glowlight
<u>Hemigrammus hyanuaryi</u>	tetra, January
<u>Hemigrammus levis</u>	tetra, golden neon
<u>Hemigrammus marginatus</u>	tetra, bassam
<u>Hemigrammus mattei</u>	tetra, slender head and tail light
<u>Hemigrammus nanus</u>	tetra, silver tip
<u>Hemigrammus ocellifer</u>	tetra, head and tail light
<u>Hemigrammus proneki</u>	tetra, Pronek's
<u>Hemigrammus pulcher</u>	tetra, garnet
<u>Hemigrammus rhodostomus</u>	tetra, rummy nose
<u>Hemigrammus rodwayi</u>	tetra, gold
<u>Hemigrammus schmardae</u>	tetra, Schmard
<u>Hemigrammus stictus</u>	tetra
<u>Hemigrammus ulreyi</u>	tetra, ulreyi
<u>Hemigrammus unilineatus</u>	tetra, featherfin
<u>Hemigrammus vorderwinkleri</u>	tetra, Vorderwinkler's
<u>Holobrycon pesu</u>	tetra, mourning
<u>Hyphessobrycon agulha</u>	tetra, red-tail flag
<u>Hyphessobrycon bellotti</u>	tetra, dash-dot
<u>Hyphessobrycon bentosi</u>	tetra, rosy
<u>Hyphessobrycon bifasciatus</u>	tetra, yellow
<u>Hyphessobrycon callistus</u>	tetra, callistus
<u>Hyphessobrycon copelandi</u>	tetra, callistus
<u>Hyphessobrycon eos</u>	tetra, dawn
<u>Hyphessobrycon erythrostigma</u>	tetra, bleeding heart (Perez)
<u>Hyphessobrycon flammeus</u>	tetra, flame (red) (rio)
<u>Hyphessobrycon georgettae</u>	tetra, Georgette's
<u>Hyphessobrycon griemi</u>	tetra, Griem's
<u>Hyphessobrycon haraldschultzi</u>	tetra, Harald Schultz's

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<u>Hyphessobrycon herbertaxelrodi</u>	tetra, black neon
<u>Hyphessobrycon heterorhabdus</u>	tetra, flag; false ulrey
<u>Hyphessobrycon innesi</u>	tetra, neon
<u>Hyphessobrycon loretoensis</u>	tetra, loreto
<u>Hyphessobrycon luetkeni</u>	tetra, Lutken's
<u>Hyphessobrycon metae</u>	tetra, purple
<u>Hyphessobrycon minimus</u>	tetra, false gold
<u>Hyphessobrycon minor</u>	tetra
<u>Hyphessobrycon ornatus</u>	tetra, ornate
<u>Hyphessobrycon peruvianus</u>	tetra, loreto
<u>Hyphessobrycon pulchripinnis</u>	tetra, lemon
<u>Hyphessobrycon roberti</u>	tetra
<u>Hyphessobrycon rosaceus</u>	tetra, rosy
<u>Hyphessobrycon rubrostigma</u>	tetra, bleeding heart
<u>Hyphessobrycon saizi</u>	tetra, Saiz's
<u>Hyphessobrycon scholzei</u>	tetra, black-lined
<u>Hyphessobrycon serpae</u>	tetra, Harald Schultz's
<u>haraldsschultzi</u>	
<u>Hyphessobrycon serpae serpae</u>	tetra, serpae
<u>Hyphessobrycon simulans</u>	neon, Schwartz's
<u>Hyphessobrycon socolofi</u>	lesser bleeding heart
<u>Hyphessobrycon stegemanni</u>	tetra, savannah
<u>Hyphessobrycon takasei</u>	tetra, coffee bean
<u>Hyphessobrycon vilmae</u>	tetra, vilma's
<u>Iguanodectes spilurus</u>	tetra, slender
<u>Iguanodectes tenuis</u>	tetra, slender
<u>Inpaichthys kerri</u>	blue emperor
<u>Ladigesia roloffi</u>	tetra, jelly bean
<u>Megalamphodus "Rubra"</u>	megalamphodus, reed
<u>Megalamphodus axelrodi</u>	pristella, red
<u>Megalamphodus axelrodi</u>	tetra, calypso
<u>Megalamphodus megalopterus</u>	tetra, black phantom
<u>Megalamphodus sweglesi</u>	tetra, Swegle's
<u>Metynnis anisurus</u>	silver dollar
<u>Metynnis argenteus</u>	metynnis, silver
<u>Metynnis calichromis</u>	silver dollar
<u>Metynnis dungerni</u>	silver dollar
<u>Metynnis heinrothi</u>	silver dollar
<u>Metynnis hypsauchen</u>	metynnis, plain
<u>Metynnis luna</u>	metynnis, moon
<u>Metynnis maculatus</u>	metynnis, spotted
<u>Metynnis schreitmuelleri</u>	silver dollar
<u>Micralestes acutidens</u>	tetra, sharp-toothed
<u>Micralestes interruptus</u>	tetra, Congo
<u>Microbrycon fredcochui</u>	tetra, Cochu's blue
<u>Mimagoniates inequalis</u>	tetra, croaking
<u>Mimagoniates microlepis</u>	tetra, blue

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Moenkhausia agnesea</u>	tetra, Agnes
<u>Moenkhausia colletti</u>	tetra
<u>Moenkhausia dichrourea</u>	moenkhausia, spot-tailed
<u>Moenkhausia goergiae</u>	tetra
<u>Moenkhausia gracilima</u>	moenkhausia, graceful
<u>Moenkhausia intermedia</u>	tetra
<u>Moenkhausia lepidura</u>	tetra
<u>Moenkhausia oligolepis</u>	tetra, glass
<u>Moenkhausia pittieri</u>	tetra, diamond
<u>Moenkhausia robertsi</u>	tetra
<u>Moenkhausia sanctaefilomenae</u>	moenkhausia, yellow banded
<u>Moenkhausia takasae</u>	tetra
<u>Myleus micans</u>	dollar, golden
<u>Myleus pacu</u>	myleus, brown
<u>Myleus rubripinnis</u>	myleus, redhook
<u>Myleus schomburgki</u>	myleus, black-barred
<u>Myleus ternetzi</u>	myleus
<u>Myloplus asterias</u>	myloplus, starry
<u>Myloplus schultzei</u>	myloplus, Schultz's
<u>Mylossoma aganthogaster</u>	mylossoma
<u>Mylossoma argenteum</u>	mylossoma, silver
<u>Mylossoma aureum</u>	silver dollar
<u>Mylossoma diriventre</u>	characin, hard-bellied
<u>Nannaethiops tritaeniatus</u>	tetra, three-lined African
<u>Nannaethiops unitaeniatus</u>	tetra, African
<u>Nematobrycon amphioxus</u>	tetra, rainbow
<u>Nematobrycon gery</u>	tetra
<u>Nematobrycon lacortei</u>	tetra, rainbow
<u>Nematobrycon palmeri</u>	tetra, emperor
<u>Paracheiroduon innesi</u>	tetra, neon
<u>Paracheiroduon simulans</u>	tetra, false neon
<u>Paradon affinis</u>	tetra, Paraguay darter
<u>Paradon caliensis</u>	tetra, barred darter
<u>Paradon piracicabae</u>	tetra, Brazilian darter
<u>Paradon pongoense</u>	pongo pongo
<u>Pedalibrycon felipponei</u>	characin, Uruguay
<u>Petersius caudalis</u>	characin, yellow Congo
<u>Petitella georgiae</u>	nose, false rummy
<u>Phenacogaster bectinatus</u>	pectinatus
<u>Phenacogaster pectinatus</u>	tetra, glass
<u>Phenacogrammus aurantiacus</u>	tetra, gold Congo
<u>Phenacogrammus caudomaculatus</u>	tetra, African moon
<u>Phenacogrammus deheynei</u>	tetra, Deheynei's Congo
<u>Phenacogrammus interruptus</u>	tetra, Congo
<u>Phoxinopsis typicus</u>	tetra
<u>Piabucas dentatus</u>	tetra, golden-striped slender

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<u>Poptella orbicularis</u>	tetra, disk
<u>Prionobrama filigera</u>	bloodfin, glass
<u>Prionobrama paraguayensis</u>	bloodfin, southern
<u>Pristella maxillaris</u>	pristella
<u>Pristella riddlei</u>	pristella (goldfinch, water)
<u>Pseudochalceus kyburzi</u>	tetra, kyburz
<u>Pseudocorynopoma doriae</u>	tetra, dragonfin
<u>Pseudocorynopoma riisei</u>	characin, swordtail
<u>Pyrrhulina beni</u>	pyrrhulina
<u>Pyrrhulina brevis</u>	pyrrhulina, short-lined
<u>Pyrrhulina filamentosa</u>	pyrrhulina
<u>Pyrrhulina laeta</u>	pyrrhulina
<u>Pyrrhulina natteri</u>	pyrrhulina, Natter's
<u>Pyrrhulina nigrofasciata</u>	pyrrhulina, black-banded
<u>Pyrrhulina rachoviana</u>	pyrrhulina, Rachow's
<u>Pyrrhulina spilota</u>	pyrrhulina, blotched
<u>Pyrrhulina vittata</u>	pyrrhulina, banded
<u>Rachoviscus crassiceps</u>	tetra, golden
<u>Roeboides guatemalensis</u>	headstander, Guatemalan
<u>Stethaprion erythropt</u>	silver dollar, bumpy-back
<u>Stethaprion innesi</u>	characin
<u>Stewardia riisei</u>	characin, swordtail
<u>Stichonodon insignis</u>	tefe gymnocorymbus
<u>Tetragonopterus argenteus</u>	tetra, silver
<u>Tetragonopterus chalceus</u>	tetra, false silver
<u>Thayeria boehlkei</u>	penguin, Bohlke's
<u>Thayeria ifati</u>	penguin
<u>Thayeria obliqua</u>	penguin, short-striped
<u>Thayeria sanctae-marieae</u>	tetra, penguin
<u>Triportheus angulatus</u>	hatchetfish, narrow
<u>Tyttocharax madeirae</u>	tetra, bristle mouthed

FAMILY Citharinidae

<u>Neolebias ansorgei</u>	neolebias, Ansorge's
<u>Neolebias landgrafi</u>	neolebias, blue-banded
<u>Neolebias trewavasae</u>	neolebias, Trewavas's
<u>Neolebias trilineatus</u>	neolebias, three-lines
<u>Neolebias unifasciatus</u>	tetra, one-lined African

FAMILY Cobitididae

<u>Acanthopthalmus cuneovirgatus</u>	loach
<u>Acanthopthalmus javanicus</u>	loach, Javanese
<u>Acanthopthalmus kuhli</u>	loach, codie; eel, leopard
<u>Acanthopthalmus myersi</u>	loach, slimy
<u>Acanthopthalmus robiginosus</u>	loach

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<u>Acanthopthalmus semicinctus</u>	loach, half-banded
<u>Acanthopthalmus shelfordi</u>	loach, Shelford's
<u>Acanthopsis choirorhynchus</u>	loach, longnose
<u>Botia beauforti</u>	loach, Beaufort's
<u>Botia berdmorei</u>	loach, Berdmore's
<u>Botia dario</u>	loach, dario
<u>Botia horae</u>	loach, Hora's
<u>Botia hymenophysa</u>	loach, banded
<u>Botia lecontei</u>	loach, Leconte's
<u>Botia lohachata</u>	loach, Pakistani
<u>Botia lucas-bahi</u>	loach, barred
<u>Botia macracantha</u>	loach, clown
<u>Botia modesta</u>	loach, orange-fin
<u>Botia morletii</u>	loach
<u>Botia sidthimunki</u>	loach, dwarf
<u>Botia striata</u>	loach, cross-banded (zebra)
<u>Cobitis taenia</u>	weatherfish, spined loach
<u>Lepidocephalus guntea</u>	loach, barbeled
<u>Lepidocephalus thermalis</u>	loach, lesser
<u>Misgurnus anguillicaudatus</u>	weatherfish
<u>Neomacheilus botia</u>	plecostomus, Hong Kong
<u>Neomacheilus fasciatus</u>	loach, barred
<u>Neomacheilus notostigma</u>	loach, fighting
<u>Noemacheilus kuiperi</u>	loach, fighting
FAMILY Curimatidae	
<u>Curimata lineopunctata</u>	curimata, spotted
<u>Curimata microcephala</u>	curimata
<u>Curimata spilura</u>	curimata, diamond-spot
<u>Semaprochilodus squamilentus</u>	prochilodus, sailfinned
<u>Semaprochilodus taeniurus</u>	prochilodus, silver
<u>Semaprochilodus theraponura</u>	prochilodus, flag-tailed
FAMILY Cyprinidae	
<u>Abramis brama</u>	bream
<u>Alburnoides bipunctatus</u>	tailor
<u>Aphyocypris pooni</u>	fish, venus
<u>Balantiocheilos melanopterus</u>	shark, bala
<u>Barbichthys laevis</u>	barb, sucker
<u>Barbodes binotatus</u>	barb, spotted
<u>Barbodes callipterus</u>	barb, clipper
<u>Barbodes camptacanthus</u>	barb, African red-finned

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Barbodes daruphani</u>	barb, pale
<u>Barbodes dorsimaculatus</u>	barb, black-line
<u>Barbodes dunckeri</u>	barb, big-spot (Duncker's)
<u>Barbodes eutaenia</u>	barb, African red-fin
<u>Barbodes everetti</u>	barb, clown
<u>Barbodes fasciatus</u>	barb, striped
<u>Barbodes fasciolatus</u>	barb, African banded
<u>Barbodes hexazona</u>	barb, belted (six-banded)
<u>Barbodes holotaenia</u>	barb, spot-scale
<u>Barbodes kerstenii</u>	barb, Kersten's
<u>Barbodes lateristriga</u>	barb, t-barb (spanner)
<u>Barbodes pentazona</u>	barb, banded (five-banded)
<u>Barbodes pinnauratus</u>	barb, gold-finned
<u>Barbodes schwanenfeldi</u>	barb, tinfoil
<u>Barbodes unitaeniatus</u>	barb, Indian strip
<u>Barbodes usambarae</u>	barb, peppered
<u>Barbodes viviparus</u>	barb, viviparous
<u>Barbus arulius</u>	barb, longfin
<u>Barbus bariloides</u>	minnow, orange-fin
<u>Barbus binotatus</u>	barb, spotted
<u>Barbus chola</u>	barb, swamp
<u>Barbus conchoniis</u>	barb, rose
<u>Barbus cummingi</u>	barb, Cumming's
<u>Barbus dunckeri</u>	barb, Duncker's
<u>Barbus everetti</u>	barb, clown
<u>Barbus fasciatus</u>	barb, stripped
<u>Barbus filamentosus</u>	barb, filament
<u>Barbus gelius</u>	barb, golden dwarf
<u>Barbus holotaenia</u>	barb, African spot-scale
<u>Barbus hulstaerti</u>	barb, butterfly
<u>Barbus hulsteri</u>	barb
<u>Barbus jae</u>	barb
<u>Barbus lateristriga</u>	barb, spanner spanner
<u>Barbus lineatus</u>	barb, striped
<u>Barbus multilineatus</u>	barb, African red-finned
<u>Barbus nigrofaciatus</u>	barb, black-ruby
<u>Barbus oligolepsis</u>	barb, checker
<u>Barbus partipentazona</u>	barb
<u>Barbus pentazona</u>	barb, five-banded (tiger)
<u>Barbus phutunio</u>	barb, dwarf
<u>Barbus schuberti</u>	barb, golden (Schubert's)
<u>Barbus semifasciolatus</u>	barb, half-striped
<u>Barbus stigma</u>	barb
<u>Barbus stoliczkanus</u>	barb, Stoliczka's
<u>Barbus terio</u>	barb, one-spot
<u>Barbus tetrazona</u>	barb, tiger
<u>Barbus ticto</u>	barb, ticto

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<u>Barbus titteya</u>	barb, cherry
<u>Barbus vittatus</u>	barb, banded
<u>Barilius christyi</u>	minnow, copper-nose
<u>Brachydanio albolineatus</u>	danio, pearl
<u>Brachydanio frankei</u>	danio, leopard
<u>Brachydanio kerri</u>	danio, Kerr's
<u>Brachydanio nigrofasciatus</u>	danio, spotted
<u>Brachydanio rerio</u>	danio, zebra striped
<u>Calcobarbus geertsi</u>	geertsi, blind African
<u>Capoeta arulius</u>	barb, longfin
<u>Capoeta binotatus</u>	barb, false two-spot
<u>Capoeta chola</u>	barb, swamp
<u>Capoeta hulstaerti</u>	barb, butterfly
<u>Capoeta melanampyx</u>	barb, ember
<u>Capoeta oligolepis</u>	barb, checker
<u>Capoeta partipentazona</u>	barb, banded
<u>Capoeta puckelli</u>	barb, two-spot African
<u>Capoeta semifasciolatus</u>	barb, half-striped
<u>Capoeta tetrazona</u>	barb, Sumatra tiger
<u>Capoeta titteya</u>	barb, cherry
<u>Carassius auratus</u>	barb, goldfish
<u>Carassius auratus gibelio</u>	carp, gibel (koi)
<u>Carassius carassius</u>	carp, crucian (koi)
<u>Chela laubuca</u>	barb, Indian glass
<u>Crossocheilus oblongus</u>	flying fox, short-nosed
<u>Cyclocheilichthys apogon</u>	barb, skin-head
<u>Cyprinus carpio</u>	carp; koi
<u>Danio aequipinnatus</u>	danio, giant
<u>Danio devario</u>	danio, bengal
<u>Danio malabaricus</u>	danio, giant
<u>Eirmotus octozona</u>	barb, false
<u>Epalzeorhynchus kalopterus</u>	flying fox
<u>Epalzeorhynchus siamensis</u>	flying fox, Siamese
<u>Esomus danricus</u>	barb, flying
<u>Esomus malayensis</u>	barb, Malayan flying
<u>Garra taeniata</u>	stone-lapping fish, Siamese
<u>Gyrinocheilus aymonieri</u>	algae eater, Chinese
<u>Hampla macrolepidota</u>	barb, silver and red
<u>Hemigrammocyppris lini</u>	minnow, garnet
<u>Horadandia atukorali</u>	minnow, midget green cardlet
<u>Labeo bicolor</u>	shark, red-tailed
<u>Labeo chrysphekadeon</u>	shark, black
<u>Labeo cylindricus</u>	shark, cylindrical
<u>Labeo erythrurus</u>	shark, rainbow
<u>Labeo forskalii</u>	shark, plain

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Labeo frenatus</u>	shark, rainbow
<u>Labeo munensis</u>	shark
<u>Labeo rubropunctatus</u>	shark, red-spotted
<u>Labeo variegatus</u>	shark, harlequin (variegated)
<u>Labiobarbus burmanicus</u>	shark, long-finned
<u>Labiobarbus festiva</u>	apollo shark, festive
<u>Labiobarbus festivus</u>	barb, signal
<u>Laubuca laubuca</u>	hatchetfish, Indian
<u>Laubuca dadiburjori</u>	dadio; orange chela
<u>Leuciscus idus</u>	ide
<u>Luciosoma bleekeri</u>	apollo shark, Bleeker's
<u>Luciosoma setigerum</u>	apollo shark, long-finned
<u>Luciosoma spilopleura</u>	apollo shark
<u>Morulius chrysopehekadion</u>	shark, black
<u>Notropis atherinoides</u>	shiner, emerald
<u>Notropis cornutus</u>	shiner, common
<u>Notropis hypselopterus</u>	shiner, sailfin
<u>Notropis lutrensis</u>	minnow, red horse; shiner, red
<u>Notropis welaka</u>	shiner, bluenose
<u>Osteochilus hasselti</u>	barb, hard-lipped
<u>Osteochilus vittatus</u>	osteochilus, black-banded
<u>Oxygaster anomalura</u>	barb, knife
<u>Oxygaster oxygastroides</u>	barb, knife (glass)
<u>Paracrossocheilus vittatus</u>	flying fox, dusky
<u>Puntioplites proctotozysron</u>	barb, yellow-cheeked
<u>Puntius amphibiuis</u>	barb, big-scale
<u>Puntius conchoniuis</u>	barb, rosy
<u>Puntius dorsalis</u>	barb, wedge
<u>Puntius filamentosus</u>	barb, black-spot
<u>Puntius gelius</u>	barb, dwarf
<u>Puntius lineatus</u>	barb, striped
<u>Puntius narayani</u>	barb, Shri Lankan two-spot
<u>Puntius nigrofasciatus</u>	barb, black ruby
<u>Puntius pleurotaenia</u>	barb, triple-stripe
<u>Puntius sachsi</u>	barb, golden
<u>Puntius schuberti</u>	barb, golden
<u>Puntius somphongsi</u>	barb, Somphong's
<u>Puntius stigma</u>	barb, two-spot
<u>Puntius stoliczkai</u>	barb, Stoliczka's
<u>Puntius ticto</u>	barb, tic-tac-toe
<u>Puntius vittatus</u>	barb, banded
<u>Puntius woehlerti</u>	barb, sickle
<u>Rasbora agilis</u>	rasbora, black-striped
<u>Rasbora argyrotaenia</u>	rasbora, silver
<u>Rasbora bankanensis</u>	rasbora, banka

SCIENTIFIC NAME

COMMON NAME

<u>Rasbora borapetensis</u>	rasbora, red-tailed
<u>Rasbora caudimaculata</u>	rasbora, greater scissortail
<u>Rasbora cephalotaenia</u>	rasbora, portfole
<u>Rasbora daniconius</u>	rasbora, golden-stripe
<u>Rasbora dorsiocellata</u>	rasbora, hi-spot
<u>Rasbora dusonensis</u>	rasbora, yellowtail
<u>Rasbora einthoveni</u>	rasbora, brilliant
<u>Rasbora elegans</u>	rasbora, elegant; rasbora,
<u>Rasbora hengeli</u>	two-spot
<u>Rasbora heteromorpha</u>	rasbora, harlequin
<u>Rasbora kalochroma</u>	rasbora, big-spot
<u>Rasbora lateristrata elegans</u>	rasbora
<u>Rasbora lateristrata</u>	rasbora, lateristrata
<u>Rasbora leptosoma</u>	rasbora, copper-striped
<u>Rasbora maculata</u>	rasbora, spotted (dwarf)
<u>Rasbora meinkeni</u>	rasbora, Meinken's
<u>Rasbora myersi</u>	rasbora, Myer's
<u>Rasbora pauciperforata</u>	rasbora, red-line
<u>Rasbora sarawakensis</u>	rasbora, sarawak
<u>Rasbora somphongsi</u>	rasbora, Somphong's
<u>Rasbora steineri</u>	rasbora, Chinese
<u>Rasbora sumatrana</u>	rasbora, Sumatran
<u>Rasbora taeniata</u>	rasbora, black-stripped
<u>Rasbora tornieri</u>	rasbora, yellow-tailed
<u>Rasbora trilineata</u>	rasbora, scissortail (three-line)
<u>Rasbora urophthalma</u>	rasbora, ocellated dwarf
<u>Rasbora vaterifloris</u>	barb, Singhalese fire
<u>Rasborichthys altior</u>	rasbora, green false
<u>Rhodeus sericeus</u>	bitterling
<u>Rohtee alfrediana</u>	minnow, copper
<u>Tanichthys albonubes</u>	minnow, white cloud mountain
<u>Triportheus angulatus</u>	hatchetfish, narrow
<u>Triportheus elongatus</u>	hatchetfish, elongated

FAMILY Gasteropelecidae

<u>Carnegiella marthae</u>	hatchetfish, black-winged
<u>Carnegiella myersi</u>	hatchetfish, Myer's
<u>Carnegiella strigata fasciata</u>	hatchetfish, marbled
<u>Carnegiella strigata strigata</u>	hatchetfish, marbled
<u>Gasteropelecus levis</u>	hatchetfish
<u>Gasteropelecus maculatus</u>	hatchetfish, spotted
<u>Gasteropelecus sternicla</u>	hatchetfish, silver
<u>Thoracocharax securis</u>	hatchetfish, long fin
<u>Thoracocharax stellatus</u>	hatchetfish, silver

SCIENTIFIC NAMECOMMON NAME

FAMILY Gymnotidae

<u>Apteronotus albifrons</u>	black ghost
<u>Apteronotus leptorhynchus</u>	ghost, long-nosed black (brown)
<u>Distocyclus conirostris</u>	knifefish, yellow
<u>Eigenmannia virescens</u>	knifefish, green
<u>Gymnorhamphichthys hypostomus</u>	knifefish, long-nosed
<u>Gymnorhamphichthys rondoni</u>	knifefish, mousetail
<u>Gymnotus anguillaris</u>	knifefish, stripped
<u>Gymnotus carapo</u>	knifefish, banded
<u>Hypopomus artedi</u>	knifefish, spotted
<u>Rhabdolichops troscheli</u>	knifefish short-headed
<u>Rhamphichthys rostratus</u>	knifefish, trumpet
<u>Steatogenys elegans</u>	knifefish, mottled
<u>Sternarchorhamphus muelleri</u>	knifefish, Mueller's
<u>Sternarchus albifrons</u>	black ghost
<u>Sternarchus hasemani</u>	knifefish, short-nose
<u>Sternopygus macrurus</u>	knifefish, variable ghost
<u>Uramara rondoni</u>	knifefish, mousetail

FAMILY Hemiodidae

<u>Hemiodopsis goeldii</u>	hemiodus, Goeldi's
<u>Hemiodopsis gracilis</u>	hemiodus, slender
<u>Hemiodopsis parnaguae</u>	hemiodus, one-spot
<u>Hemiodopsis quadrimaculatus</u>	hemiodus, bared
<u>Hemiodopsis semitaeniatus</u>	hemiodus black and white tailed
<u>Hemiodopsis sterni</u>	hemiodus, Stern's
<u>Hemiodus gracilis</u>	hemiodus, red tail
<u>Hemiodus quadrimaculatus</u>	hemiodus, banded
<u>vorderwinkler</u>	
<u>Hemiodus semitaeniatus</u>	hemiodus

FAMILY Homalopteridae

<u>Homaloptera orthogoniata</u>	loach, saddlespot
<u>Pseudogastromyzon myersi</u>	plecostomus, Hong Kong

FAMILY Lebiasinidae

<u>Nannobrycon eques</u>	pencilfish
<u>Nannobrycon unifasciatus</u>	penguin
<u>Nannostomus anomalus</u>	pencilfish
<u>Nannostomus aripirangensis</u>	pencilfish, aripiranga
<u>Nannostomus beckfordi</u>	pencilfish, Beckford's
<u>Nannostomus bifasciatus</u>	pencilfish, two-striped
<u>Nannostomus eques</u>	pencilfish, brown-tailed
<u>Nannostomus espei</u>	pencilfish, barred

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Nannostomus harrisoni</u>	pencilfish, Harrison's
<u>Nannostomus marginatus</u>	pencilfish, dwarf
<u>Nannostomus trifasciatus</u>	pencilfish, three-lined
<u>Nannostomus unifasciatus</u>	pencilfish, one-lined
<u>Poecilobrycon auratus</u>	pencilfish
<u>Poecilobrycon digrammus</u>	pencilfish, two-striped
<u>Poecilobrycon eques</u>	pencilfish, tube-mouthed
<u>Poecilobrycon harrison</u>	pencilfish, Harrison's
<u>Poecilobrycon unifasciatus</u>	pencilfish, one-lined
FAMILY <u>Lepidogalaxiidae</u>	
<u>Lepidogalaxias salamandroides</u>	mud minnow, salamander
ORDER Dactylopteriformes	
FAMILY Dactylopteridae	
Dactylopteridae (all species in family)	gurnard, flying
ORDER Elopiformes	
FAMILY Albulidae	
Albulidae (all species in family)	bonefish
FAMILY Elopidae	
Elopidae (all species in family)	ladyfish
ORDER Gadiformes	
FAMILY Bythitidae	
Bythitidae (all species in family)	brotulid
FAMILY Carapodidae	
Carapodidae (all species in family)	pearl fish
ORDER Gasterosteiformes	
FAMILY Aulostomidae	
Aulostomidae (all species in family)	trumpetfish
FAMILY Centriscidae	
Centriscidae (all species in family)	shrimpfish

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
family)	
FAMILY Fistulariidae	
Fistulariidae (all species in family)	cornetfish
FAMILY Gasterosteidae	
<u>Apeltes quadracus</u>	stickleback, four-spined
<u>Culaea inconstans</u>	stickleback, five-spined (brook)
<u>Gasterosteus aculeatus</u>	stickleback, three-spined
FAMILY Indostomidae	
<u>Indostomus paradoxus</u>	paradox fish
FAMILY Syngnathidae	
Syngnathidae (all species in family)	pipefish
ORDER Gobiesociformes	
FAMILY Callionymidae	
Callionymidae (all species in family)	dragonet
FAMILY Gobiesocidae	
Gobiesocidae (all species in family)	clingfish
ORDER Lophiiformes	
FAMILY Antennariidae	
Antennariidae (all species in family)	anglerfish
FAMILY Ogcocephalidae	
Ogcocephalidae (all species in family)	batfish
ORDER Mormyriiformes	
FAMILY Gymnarchidae	
<u>Gymnarchus niloticus</u>	aba aba; Nile fish
FAMILY Mormyridae	
<u>Brienomyrus brachistius</u>	whale, white-faced
<u>Campylomormyrus cassaicus</u>	whale, donkey-faced
<u>Campylomormyrus rhychophorus</u>	down-polker

SCIENTIFIC NAMECOMMON NAME

<u>Campylomormyrus tamandua</u>	mormyrid, worm-jawed
<u>Cyprinoides dicorhynchus</u>	mormyrid
<u>Genyomrus donnyi</u>	mormyrid
<u>Gnathonemus abadii</u>	elephantnose
<u>Gnathonemus cyprinoides</u>	elephantnose
<u>Gnathonemus deboensis</u>	elephantnose
<u>Gnathonemus elephas</u>	black elephant
<u>Gnathonemus leopoldianus</u>	elephantnose
<u>Gnathonemus macrolepidotus</u>	mormyrid, scaly
<u>Gnathonemus moori</u>	elephant fish, roundnosed
<u>Gnathonemus niger</u>	elephantnose
<u>Gnathonemus numenius</u>	elephantnose
<u>Gnathonemus petersi</u>	elephantnose, Peter's
<u>Gnathonemus senegalensis</u>	elephantnose
<u>Gnathonemus shilthuisiae</u>	elephantnose
<u>Gnathonemus stanleyanus</u>	elephantnose
<u>Gnathonemus tamandua</u>	mormyrid, the worm-jawed
<u>Gnathonemus victoriae</u>	elephant fish
<u>Hippopotamyrus discorhynchus</u>	mormyrid, scaly
<u>Hyperopius bebe</u>	mormyrid
<u>Isichtys henri</u>	mormyrid
<u>Marcucenius ansorgii</u>	elephantnose
<u>Marcucenius brachistius</u>	elephantnose
<u>Marcucenius castelnaui</u>	elephantnose
<u>Marcucenius harringtoni</u>	elephantnose
<u>Marcucenius ihuysi</u>	elephantnose
<u>Marcucenius isidori</u>	elephantnose
<u>Marcucenius longianalis</u>	elephantnose
<u>Marcucenius macrolepidotus</u>	elephantnose
<u>Marcucenius petricolas</u>	elephantnose
<u>Marcucenius plagiostoma</u>	elephantnose
<u>Marcucenius psittacus</u>	elephantnose
<u>Mormyrops caballus</u>	mormyrid
<u>Mormyrops engystoma</u>	mormyrid, torpedo
<u>Mormyrops nigricans</u>	mormyrid
<u>Mormyrops oudoti</u>	mormyrid
<u>Mormyrus cashive</u>	mormyrid
<u>Mormyrus ellenbergei</u>	mormyrid
<u>Mormyrus hasselquisti</u>	mormyrid
<u>Mormyrus kannume</u>	mormyrid
<u>Mormyrus lacerda</u>	mormyrid
<u>Mormyrus longirostris</u>	whale, short-nose; dolphin fish
<u>Mormyrus macrodon</u>	mormyrid
<u>Mormyrus niloticus</u>	elephantnose
<u>Mormyrus oris</u>	mormyrid
<u>Mormyrus rume</u>	mormyrid

SCIENTIFIC NAME

COMMON NAME

<u>Mormyrus thomasai</u>	elephantnose
<u>Petrocephalus bane</u>	whale
<u>Petrocephalus bovei</u>	whale, gray
<u>Petrocephalus catostoma</u>	whale, African
<u>Petrocephalus sauvagei</u>	whale
<u>Petrocephalus simus</u>	whale, dorsal band
<u>Pollimyrus angolensis</u>	whale, bottle-nose
<u>Pollimyrus cattelnaui</u>	whale, baby; whale, silver
<u>Pollimyrus nigripinis</u>	whale, dusky
<u>Stomatochinus corneti</u>	mormyrid

ORDER Osteoglossiformes

FAMILY Notopteridae

<u>Notopterus afer</u>	featherfin, African flag
<u>Notopterus chitala</u>	featherback, clown
<u>Notopterus notopterus</u>	featherback, Malayan (Sumatra)
<u>Papyrocranus afer</u>	featherfin, African flag
<u>Xenomystus nigri</u>	featherback, African

FAMILY Osteoglossidae

<u>Clupisudis niloticus</u>	heterotis
<u>Osteoglossum bicirrhosum</u>	arowana
<u>Osteoglossum ferreirai</u>	arowana, black
<u>Scleropages jardini</u>	saratoga, gulf (northern)
<u>Scleropages leichardti</u>	saratoga; baramundi, spotted

FAMILY Pantodontidae

<u>Pantodon buchholzi</u>	butterflyfish
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ORDER Perciformes

FAMILY Acanthuridae

Acanthuridae (all species in family)	surgeonfish
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FAMILY Anabantidae

<u>Anabas testudineus</u>	perch, climbing
<u>Ctenopoma acutirostre</u>	perch, spotted climbing
<u>Ctenopoma ansorgei</u>	ctenopoma, ornate
<u>Ctenopoma congicum</u>	ctenopoma, Congo
<u>Ctenopoma fasciolatum</u>	ctenopoma, banded
<u>Ctenopoma kingsleyi</u>	ctenopoma, Kingsley's
<u>Ctenopoma nanum</u>	perch, dwarf climbing
<u>Ctenopoma ocellatum</u>	bushfish, chocolate

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Ctenopoma oxyrhynchus</u>	ctenopoma, mottled
FAMILY Anarhichadidae	
<u>Anarhichas lupus</u>	wolffish, atlantic
FAMILY Apocrypteidae	
<u>Parapocryptes serperaster</u>	mudskipper, slim
FAMILY Apogonidae	
Apogonidae (all species in family)	cardinalfish
FAMILY Belontiidae	
<u>Belontia hasselti</u>	combtail, Java
<u>Belontia signata</u>	combtail
<u>Betta bellica</u>	betta, slender
<u>Betta brederi</u>	betta, Breder's
<u>Betta coccina</u>	fighting fish, red
<u>Betta fisciata</u>	fighting fish, stripe
<u>Betta imbellis</u>	betta, peaceful (crescent)
<u>Betta macrostoma</u>	brunei beauty
<u>Betta pugnax</u>	betta, mouth brooding
<u>Betta smaragdina</u>	betta, peaceful
<u>Betta splendens</u>	fighting fish, Siamese
<u>Colisa chuna</u>	gourami, honey
<u>Colisa fasciata</u>	gourami, giant
<u>Colisa labiosa</u>	gourami, thick-lipped
<u>Colisa lalia</u>	gourami, dwarf
<u>Macropodus chinensis</u>	paradise fish, round-tail
<u>Macropodus concolor</u>	paradise fish, black
<u>Macropodus cupanus cupanus</u>	paradise fish, spike-tail
<u>Macropodus cupanus dayi</u>	paradise fish, Day's
<u>Macropodus opercularis</u>	paradise fish
<u>Malpulutta kretseri</u>	malpulatta
<u>Parosphromenus dreissneri</u>	gourami, licorice
<u>Parosphromenus filamentosus</u>	gourami, spike tailed licorice
<u>Pseudosphromenus cupans</u>	paradise fish, spike-tailed
<u>Sphaerichthys osphromenoides</u>	gourami, chocolate
<u>Trichogaster leeri</u>	gourami, pearl
<u>Trichogaster microlepis</u>	gourami, moonbeam
<u>Trichogaster pectoralis</u>	gourami, snakeskin
<u>Trichogaster trichopterus</u>	gourami, three-spot (blue)
<u>Trichopsis pumilus</u>	gourami, pygmy
<u>Trichopsis schalleri</u>	gourami, three-stripe croaking
<u>Trichopsis vittatus</u>	gourami, croaking

SCIENTIFIC NAMECOMMON NAME

FAMILY Blenniidae
Blenniidae (all species in
family)

blenny

FAMILY Caesionidae
Caesio pulcherrimus

caesio fish

FAMILY Carangidae
Carangidae (all species in
family)

jack

FAMILY Centrarchidae
Centrarchus macropterus
Elassoma evergladei
Elassoma zonatum
Enneacanthus chaetodon
Enneacanthus gloriosus
Enneacanthus obesus
Lepomis gibbosus
Lepomis gulosus
Lepomis humilis
Lepomis macrochirus
Lepomis megalotis
Mesogonistius chaetodon

flier; bass, peacock-eyed
sunfish, everglades pygmy
sunfish, banded dwarf
sunfish, black-banded
sunfish, bluespotted
sunfish, banded
sunfish, pumpkinseed
warmouth
sunfish, orangespotted
bluegill
sunfish, longeared
sunfish, blackbanded

FAMILY Centropomidae
Ambassis agrammus
Ambassis agrammus agassiz
Ambassis ambassis
Ambassis buruensis
Ambassis commersoni
Ambassis elongatus
Ambassis lala
Ambassis macleayi
Ambassis marianus
Ambassis miops
Ambassis reticulata
Ambassis interruptus
Centropomus undecimalis
Chanda ambassis
Chanda baculis
Chanda buruensis
Chanda lala
Chanda ranga
Chanda wolfei

perchlet, sailfin
glassfish, olive
perch, African glass
glassfish, buru
glassfish, Commerson's
glassfish, yellowfin
glassfish
glassfish, reticulated
glassfish, Mary River
glassfish, flag-tailed
perchlet, reticulated
glassfish, long-spined
snook
perch, African glass
glassfish, Burmese
glassfish, Siamese
glassfish, Indian
glassfish, glass perch
glassfish

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Cepolidae	
<u>Acanthocepola indica</u>	bandfish, Philippine
<u>Acanthocepola limbata</u>	bandfish, spotfin
<u>Cepola australis</u>	bandfish, Australian
FAMILY Chaenopsidae	
Chaenopsidae (all species in family)	pikeblenny
FAMILY Chaetodontidae	
Chaetodontidae (all species in family)	butterflyfish
FAMILY Cheilodactylidae	
Cheilodactylidae (all species in family)	morwong
FAMILY Cichlidae	
<u>Acarichthys heckelii</u>	cichlid, elusive
<u>Acarichthys thayeri</u>	cichlid
<u>Acaronia nassa</u>	cichlid, big-eyed
<u>Acaronia trimaculata</u>	cichlid
<u>Aequidens awani</u>	cichlid, golden
<u>Aequidens bimaculatum</u>	cichlid
<u>Aequidens coeruleopunctatus</u>	cichlid, blue-point flag
<u>Aequidens duopunctata</u>	cichlid
<u>Aequidens freniferus</u>	cichlid
<u>Aequidens geayi</u>	cichlid
<u>Aequidens guianensis</u>	cichlid
<u>Aequidens hercules</u>	cichlid, hercules
<u>Aequidens itanyi</u>	cichlid, dolphin
<u>Aequidens latifrons</u>	acara, blue
<u>Aequidens mariae</u>	cichlid, Maria's
<u>Aequidens maroni</u>	cichlid, keyhole
<u>Aequidens metae</u>	cichlid
<u>Aequidens parahuayensis</u>	cichlid
<u>Aequidens portalegrensis</u>	acara, port (black)
<u>Aequidens pulcher</u>	acara, blue
<u>Aequidens rivulatus</u>	green terror
<u>Aequidens sapayensis</u>	cichlid
<u>Aequidens subocularis</u>	cichlid
<u>Aequidens syspilus</u>	cichlid
<u>Aequidens tetramerus</u>	cichlid, blue flag
<u>Aequidens vittata</u>	cichlid
<u>Aequidens zamorensus</u>	cichlid
<u>Apistogramma</u> (all species in genus)	cichlid, dwarf

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Astatoreochromis straeleni</u>	cichlid, yellow-bellied
<u>Astatotilapia bloyeti</u>	mouthbrooder, Bloyet's
<u>Astronotus ocellatus</u>	cichlid, peacock oscar (velvet)
<u>Aulonocara jacobfreibergi</u>	cichlid, African
<u>Aulonocara nyassae</u>	cichlid, African peacock
<u>Benthochromis tricoti</u>	featherfin, giant
<u>Bioteocus opercularis</u>	cichlid, green dwarf
<u>Biotodoma cupido</u>	cichlid, cupid
<u>Callochromis macrops melanostigma</u>	cichlid
<u>Callochromis pleurospilus</u>	cichlid, pastel
<u>Chaetobranchus bitaeniatus</u>	cichlid, two-striped
<u>Chaetobranchus flavescens</u>	cichlid, red-eye
<u>Chalinochromis brichardi</u>	cichlid, lyretail (Brichard's)
<u>Chromidotilapia guentheri</u>	mouthbrooder, Gunther's
<u>Cichla ocellaris</u>	cichlid, eye-spot; tuconary
<u>Cichla temensis</u>	cichlid, spot-line peacock
<u>Cichlasoma adspersum</u>	cichlid
<u>Cichlasoma alfari</u>	cichlid, pastel
<u>Cichlasoma arnoldi</u>	cichlid
<u>Cichlasoma atromaculatum</u>	cichlid, three-spot
<u>Cichlasoma aureum</u>	cichlid, golden
<u>Cichlasoma autochthom</u>	cichlid
<u>Cichlasoma axelrodi</u>	chucu, black
<u>Cichlasoma bartoni</u>	cichlid, Barton's
<u>Cichlasoma beani</u>	cichlid
<u>Cichlasoma bifasciatum</u>	cichlid, red-spotted
<u>Cichlasoma bimaculatum</u>	cichlid, two-spot
<u>Cichlasoma biocellatum</u>	Jack Dempsey
<u>Cichlasoma carpinte</u>	cichlid, pearlscale
<u>Cichlasoma centrarchus</u>	cichlid, flier
<u>Cichlasoma citrinellum</u>	cichlid, midas
<u>Cichlasoma coryphaenoides</u>	cichlid, chocolate
<u>Cichlasoma crassa</u>	cichlid
<u>Cichlasoma cutteri</u>	cichlid, Cutter's
<u>Cichlasoma cyanoguttatum</u>	cichlid, Texas
<u>Cichlasoma dovii</u>	cichlid, Dow's
<u>Cichlasoma erythraeum</u>	devil, red
<u>Cichlasoma facetum</u>	chanchito
<u>Cichlasoma fenestratum</u>	cichlid
<u>Cichlasoma festae</u>	cichlid, Festa's
<u>Cichlasoma festivum</u>	cichlid, flag
<u>Cichlasoma friedrichsthali</u>	cichlid, Friedrichsthal's
<u>Cichlasoma grammodes</u>	cichlid, many-pointed
<u>Cichlasoma guttulatum</u>	cichlid, gold-cheeked

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<u>Cichlasoma haitiensis</u>	cichlid
<u>Cichlasoma hartwegi</u>	cichlid, Hartweg's
<u>Cichlasoma hellabrunni</u>	cichlid
<u>Cichlasoma intermedium</u>	cichlid, Jordan's
<u>Cichlasoma kraussi</u>	cichlid, sharpheaded
<u>Cichlasoma labiatum</u>	cichlid, red devil
<u>Cichlasoma labridens</u>	cichlid, curve-bar
<u>Cichlasoma longimanus</u>	cichlid, longfin
<u>Cichlasoma macracanthus</u>	cichlid, high-spine
<u>Cichlasoma maculicauda</u>	cichlid, blackbelt
<u>Cichlasoma managuense</u>	managuense
<u>Cichlasoma meeki</u>	firemouth
<u>Cichlasoma melanurum</u>	cichlid
<u>Cichlasoma minkleyi</u>	cichlid, Minkley's
<u>Cichlasoma motaguense</u>	motaguense
<u>Cichlasoma nicaraguense</u>	spilotum
<u>Cichlasoma nigrofasciatum</u>	cichlid, convict
<u>Cichlasoma octofasciatum</u>	Jack Dempsey
<u>Cichlasoma ornatum</u>	cichlid
<u>Cichlasoma panamense</u>	cichlid
<u>Cichlasoma popenoi</u>	cichlid
<u>Cichlasoma psitticum</u>	cichlid, parrot
<u>Cichlasoma ramsdeni</u>	cichlid
<u>Cichlasoma robertsoni</u>	cichlid, Robertson's
<u>Cichlasoma rostratum</u>	cichlid
<u>Cichlasoma sajica</u>	cichlid, t-bar; sajica
<u>Cichlasoma salvini</u>	cichlid, Salvin's yellow-belly
<u>Cichlasoma severum</u>	severum
<u>Cichlasoma sexfaciatum</u>	cichlid
<u>Cichlasoma sieboldi</u>	cichlid
<u>Cichlasoma spectabile</u>	cichlid
<u>Cichlasoma spilotum</u>	cichlid
<u>Cichlasoma spilurum</u>	cichlid, blue-eye
<u>Cichlasoma spinosissimum</u>	cichlid
<u>Cichlasoma temporale</u>	cichlid
<u>Cichlasoma terrabae</u>	cichlid
<u>Cichlasoma tetracanthus</u>	cichlid, Cuban
<u>Cichlasoma trimaculatum</u>	cichlid, three-spot
<u>Cichlasoma tuba</u>	cichlid
<u>Cichlasoma umbriferum</u>	umbriferum
<u>Cichlasoma urophthalmus</u>	cichlid, eight-barred
<u>Cichlasoma zonatum</u>	cichlid
<u>Corematodus shiranus</u>	cichlid
<u>Crenicara (all species in genus)</u>	cichlid, checkered
<u>Cyathochromis obliquidens</u>	cichlid
<u>Cyathopharynx furcifer</u>	furcifer

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Cynotilapia afra</u>	cichlid, dwarf zebra (dogtooth)
<u>Cynotilapia axelrodi</u>	cichlid, Axelrod's dogtooth
<u>Cyphotilapia frontosa</u>	frontosa
<u>Cyprichromis brieni</u>	cichlid, slender
<u>Cyprichromis leptosoma</u>	cichlid, black-finned slender
<u>Cyprichromis microlepidotus</u>	cichlid
<u>Cyprichromis nigripinnis</u>	cichlid
<u>Cyrtocara annectens</u>	cichlid
<u>Cyrtocara moorei</u>	cichlid
<u>Cyrtocara venusta</u>	cichlid
<u>Dicrossus</u> (all species in genus)	cichlid, checkered
<u>Docimodus johnstoni</u>	cichlid
<u>Eretmodus cyanostictus</u>	cichlid, striped goby
<u>Etroplus maculatus</u>	chromide, orange
<u>Etroplus suratensis</u>	chromide, banded
<u>Genyochromis mento</u>	scale-eater, Malawian
<u>Geophagus australis</u>	earth eater, austral
<u>Geophagus auticeps</u>	cutie
<u>Geophagus balzanii</u>	mouthbrooder, Paraguay
<u>Geophagus brasiliensis</u>	cichlid, Brazil high hat (pearl)
<u>Geophagus cupido</u>	geophagus
<u>Geophagus gymnoglenys</u>	geophagus, squarehead
<u>Geophagus hondae</u>	geophagus, redhump
<u>Geophagus jurupari</u>	earth eater, demon fish
<u>Geophagus rhabdotus</u>	geophagus, pearl-striped
<u>Geophagus steindachneri</u>	geophagus, redrump
<u>Geophagus surinamensis</u>	geophagus, Surinam
<u>Gephyrochromis lawsi</u>	cichlid, violet
<u>Gephyrochromis moovei</u>	cichlid
<u>Gephyrochromis morii</u>	cichlid, yellow-tailed violet
<u>Gobiochromis timanti</u>	cichlid, dwarf African
<u>Gynogeophagus australis</u>	cichlid, earth eater
<u>Gynogeophagus balzanii</u>	cichlid, earth eater
<u>Haplochromis ahli</u>	haplochromis, electric blue
<u>Haplochromis anaphyrmus</u>	cichlid
<u>Haplochromis annectens</u>	annectens
<u>Haplochromis argyrosoma</u>	cichlid
<u>Haplochromis atritaeniata</u>	cichlid
<u>Haplochromis auromarginatus</u>	cichlid
<u>Haplochromis boadzulu</u>	cichlid

SCIENTIFIC NAMECOMMON NAME

<u>Haplochromis burtoni</u>	mouthbrooder, Burton's
<u>Haplochromis callipterus</u>	callipterus
<u>Haplochromis chrysonotus</u>	cichlid
<u>Haplochromis cinereus</u>	hap, ashy
<u>Haplochromis compressiceps</u>	eye-biter, Malawian
<u>Haplochromis decorus</u>	cichlid
<u>Haplochromis desfontainesi</u>	mouthbrooder, desert
<u>Haplochromis dichrourus</u>	hap, Victoria lavender
<u>Haplochromis electra</u>	hap, deep-water
<u>Haplochromis epichorialis</u>	cichlid
<u>Haplochromis ericotaenia</u>	hap
<u>Haplochromis euchilus</u>	euchilus, big lips
<u>Haplochromis eucinostomus</u>	cichlid
<u>Haplochromis favimanus</u>	cichlid
<u>Haplochromis fenestratus</u>	cichlid
<u>Haplochromis fuscotaeniatus</u>	cichlid
<u>Haplochromis guentheri</u>	hap
<u>Haplochromis hennydaviesae</u>	cichlid
<u>Haplochromis heterotaenia</u>	cichlid
<u>Haplochromis horei</u>	haplochromis, spothead
<u>Haplochromis ineda</u>	hap
<u>Haplochromis jacksoni</u>	cichlid
<u>Haplochromis kiwinge</u>	cichlid
<u>Haplochromis labridens</u>	cichlid
<u>Haplochromis labrosus</u>	labrosus
<u>Haplochromis lacrymosus</u>	hap, tear-drop
<u>Haplochromis lacteristriga</u>	hap, basket
<u>Haplochromis lepturus</u>	cichlid
<u>Haplochromis linni</u>	polystigma, elephant-nose
<u>Haplochromis livingstoni</u>	livingstoni
<u>Haplochromis loboehilus</u>	livingstoni
<u>Haplochromis longimanus</u>	cichlid
<u>Haplochromis macrognathus</u>	hap, Victoria big-mouth
<u>Haplochromis macrostoma</u>	livingstoni
<u>Haplochromis margarita</u>	livingstoni
<u>Haplochromis melanotaenia</u>	hap, black-fin
<u>Haplochromis mloto</u>	livingstoni
<u>Haplochromis modestus</u>	livingstoni
<u>Haplochromis mollis</u>	hap, softly
<u>Haplochromis moorii</u>	lumphead, blue
<u>Haplochromis multicolor</u>	mouthbreeder, Egyptian
<u>Haplochromis nigritaeniatus</u>	mouthbreeder, Egyptian
<u>Haplochromis nitidus</u>	mouthbreeder, Egyptian
<u>Haplochromis nkatae</u>	nkatae, common
<u>Haplochromis nototaenia</u>	hap, stripe-back
<u>Haplochromis nubilus</u>	cichlid
<u>Haplochromis obtusus</u>	hap, pig-nose

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<u>Haplochromis ovatus</u>	mouthbreeder, Egyptian
<u>Haplochromis pardalis</u>	hap
<u>Haplochromis pectoralis</u>	hap
<u>Haplochromis pfefferi</u>	hap, Tanganyika
<u>Haplochromis philander</u>	mouthbreeder, Egyptian
<u>Haplochromis pholidophorus</u>	mouthbreeder, Egyptian
<u>Haplochromis placodon</u>	mouthbreeder, Egyptian
<u>Haplochromis plagiotaenia</u>	hap, rainbow
<u>Haplochromis polyodon</u>	hap
<u>Haplochromis polystigma</u>	polystigma, polly
<u>Haplochromis quadrimaculatus</u>	polystigma, polly
<u>Haplochromis riponianus</u>	hap, Victoria red-tail
<u>Haplochromis rostratus</u>	rostratus
<u>Haplochromis sauvagei</u>	hap, Victoria mottled
<u>Haplochromis similis</u>	polystigma, polly
<u>Haplochromis sphaerodon</u>	polystigma, polly
<u>Haplochromis spilonotus</u>	polystigma, polly
<u>Haplochromis spilostichus</u>	polystigma, polly
<u>Haplochromis stonemani</u>	polystigma, polly
<u>Haplochromis strigatus</u>	polystigma, polly
<u>Haplochromis subocularis</u>	polystigma, polly
<u>Haplochromis taeniolatus</u>	rostratus
<u>Haplochromis tetrastigma</u>	rostratus
<u>Haplochromis venustus</u>	rostratus
<u>Haplochromis virginalis</u>	rostratus
<u>Haplochromis wingati</u>	mouthbrooder, Nigerian
<u>Haplochromis woodi</u>	rostratus
<u>Hemichromis bimaculatus</u>	cichlid, jewel
<u>Hemichromis cristatus</u>	cichlid, crown jewel
<u>Hemichromis fasciatus</u>	hemichromis, five-spotted
<u>Hemichromis lifalili</u>	cichlid, blood-red jewel
<u>Hemichromis paynei</u>	cichlid, Payne's jewel
<u>Hemichromis tersquamatus</u>	cichlid
<u>Hemichromis thomasi</u>	cichlid
<u>Hemichromis voltae</u>	cichlid
<u>Hemihaplochromis multicolor</u>	mouthbrooder, Egyptian
<u>Hemihaplochromis philander</u>	mouthbrooder, South African
<u>Hemitylapia oxyrhynchus</u>	cichlid, oxyrhynchus
<u>Herichthys cyanoguttatus</u>	cichlid, Texas
<u>Heros affinis</u>	cichlid
<u>Heros facetus</u>	cichlid
<u>Heros septemfasciatus</u>	cichlid
<u>Herotilapia multispinosa</u>	cichlid, rainbow
<u>Iodotropheus sprengerae</u>	cichlid, rusty
<u>Julidochromis</u> (all species in genus)	cichlid, dwarf
<u>Labeotropheus fuelleborni</u>	cichlid, Fuelleborn's

SCIENTIFIC NAME

COMMON NAME

<u>Labeotropheus trewavasae</u>	trewavasae, red-top
<u>Labidochromis caeruleus</u>	labido, blue-white
<u>Labidochromis fryeri</u>	labido, white
<u>Labidochromis vellicans</u>	vellicans
<u>Laetacara (all species in genus)</u>	cichlid, dwarf
<u>Lamprologus attenuatus</u>	lamprologus, marbled
<u>Lamprologus brevis</u>	brevis
<u>Lamprologus brichardi</u>	lamprologus, lyretail
<u>Lamprologus buescheri</u>	lamprologus, Buescher's
<u>Lamprologus callipterus</u>	callipterus
<u>Lamprologus calvus</u>	lamprologus, pearly
<u>Lamprologus compressiceps</u>	compressiceps
<u>Lamprologus congoensis</u>	lamprologus, Congo
<u>Lamprologus cunningtoni</u>	lamprologus, black
<u>Lamprologus elongatus</u>	elongatus
<u>Lamprologus falcicula</u>	lamprologus, long-fin
<u>Lamprologus fasciatus</u>	lamprologus, barred
<u>Lamprologus furcifer</u>	cichlid, sail-fin
<u>Lamprologus gracilis</u>	lamprologus, graceful
<u>Lamprologus kendalli</u>	nkambe
<u>Lamprologus leleupi</u>	cichlid, lemon
<u>Lamprologus lemairii</u>	lamprologus, Lemaire's
<u>Lamprologus magarae</u>	shell-dweller, magara
<u>Lamprologus meeli</u>	meeli
<u>Lamprologus mocquardi</u>	lamprologus, Mocquard's
<u>Lamprologus mondabu</u>	lamprologus, mondabu
<u>Lamprologus moorii</u>	lamprologus, moorii
<u>Lamprologus multifasciatus</u>	lamprologus, many-banded dwarf
<u>Lamprologus mustax</u>	lamprologus, white-cheeked
<u>Lamprologus niger</u>	lamprologus, muddy
<u>Lamprologus nkambae</u>	cichlid
<u>Lamprologus obscurus</u>	lamprologus, mottly
<u>Lamprologus ocellatus</u>	shell-dweller, ocellated
<u>Lamprologus olivaceus</u>	lamprologus, olive
<u>Lamprologus ornatipinnis</u>	lamprologus
<u>Lamprologus pleuromaculatus</u>	lamprologus, blotched
<u>Lamprologus prochilus</u>	lamprologus, sling-jaw
<u>Lamprologus profundicola</u>	lamprologus, deep-water
<u>Lamprologus savoryi elongatus</u>	lamprologus, lyretail
<u>Lamprologus sexfasciatus</u>	lamprologus, six-bar
<u>Lamprologus tetracanthus</u>	lamprologus, pearl-lined
<u>Lamprologus toae</u>	lamprologus
<u>Lamprologus tretocephalus</u>	cichlid, five-bar
<u>Lamprologus weneri</u>	lamprologus
<u>Leptotilapia irvinei</u>	cichlid
<u>Leptotilapia tinanti</u>	cichlid

SCIENTIFIC NAMECOMMON NAME

<u>Limnochromis auritus</u>	auritus
<u>Lobochilotes labiatus</u>	cichlid, zebra
<u>Melanochromis auratus</u>	cichlid, malawi golden
<u>Melanochromis brevis</u>	mbuna
<u>Melanochromis chipokae</u>	mbuna, Chipokee
<u>Melanochromis exasperatus</u>	mbuna
<u>Melanochromis johanni</u>	johanni
<u>Melanochromis labrosus</u>	mbuna
<u>Melanochromis melanopterus</u>	mbuna, black
<u>Melanochromis parallelus</u>	mbuna, parallel-striped
<u>Melanochromis perspicax</u>	mbuna, violet-striped
<u>Melanochromis simulans</u>	mbuna, longsnout
<u>Melanochromis vermivorus</u>	mbuna, purple
<u>Nannacara anomala</u>	cichlid, golden dwarf
<u>Nannacara aureocephalus</u>	cichlid, golden-head dwarf
<u>Nannacara taenia</u>	cichlid
<u>Nanochromis</u> (all species in genus)	cichlid, dwarf
<u>Neetroplus nematopus</u>	cichlid, little lake
<u>Otopharynx auromarginatus</u>	cichlid
<u>Otopharynx selenurus</u>	cichlid
<u>Oxylapia polli</u>	cichlid
<u>Papiliochromis</u> (all species in genus)	cichlid, butterfly
<u>Paratilapia dorsalis</u>	cichlid
<u>Paratilapia longipinnis</u>	cichlid
<u>Paratilapia nigrofasciata</u>	cichlid
<u>Paratilapia polleni</u>	cichlid
<u>Paretroplus</u> (all species in genus except <u>Paretroplus polyactis</u> and <u>P. sp. "lamena"</u>)	cichlid, Damba
<u>Pelmatochromis aereocephalus</u>	cichlid
<u>Pelmatochromis annectens</u>	cichlid, five-spot African
<u>Pelmatochromis ansorgei</u>	cichlid, five-spot African
<u>Pelmatochromis arnoldi</u>	cichlid, five-spot African
<u>Pelmatochromis batesii</u>	cichlid
<u>Pelmatochromis buettikoferi</u>	cichlid
<u>Pelmatochromis camerunensis</u>	cichlid
<u>Pelmatochromis caudifasciatus</u>	cichlid
<u>Pelmatochromis cerasogaster</u>	cichlid
<u>Pelmatochromis congicus</u>	cichlid
<u>Pelmatochromis corbali</u>	cichlid
<u>Pelmatochromis exsul</u>	cichlid
<u>Pelmatochromis guentheri</u>	mouthbreeder, Guenther's
<u>Pelmatochromis haugi</u>	cichlid
<u>Pelmatochromis humilis</u>	cichlid
<u>Pelmatochromis kingleyae</u>	cichlid
<u>Pelmatochromis klugei</u>	cichlid, Kluge's dwarf

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Pelmatochromis kribensis</u>	kribensis
<u>Pelmatochromis loennbergi</u>	cichlid
<u>Pelmatochromis longirostris</u>	cichlid
<u>Pelmatochromis ocellifer</u>	cichlid
<u>Pelmatochromis pellegrini</u>	cichlid
<u>Pelmatochromis pulcher</u>	cichlid
<u>Pelmatochromis roloffii</u>	cichlid
<u>Pelmatochromis ruweti</u>	cichlid
<u>Pelmatochromis schoutedeni</u>	cichlid
<u>Pelmatochromis subocellatus</u>	cichlid, violet
<u>Pelmatochromis thomasi</u>	cichlid, African butterfly
<u>Pelvicachromis (all species in genus)</u>	cichlid, dwarf
<u>Petenia kraussi</u>	cichlid
<u>Petenia myersi</u>	cichlid
<u>Petenia spectabilis</u>	cichlid
<u>Petenia splendida</u>	cichlid
<u>Petrochromis "golden"</u>	cichlid
<u>Petrochromis fasciolatus</u>	petrochromis, banded
<u>Petrochromis orthognatus</u>	petrochromis, plain-mouth
<u>Petrochromis polyodon</u>	petrochromis, brown
<u>Petrochromis trewavasae</u>	petrochromis, filament-fin
<u>Petrotilapia nigra</u>	petrotilapia, dusky
<u>Petrotilapia tridentiger</u>	petrotilapia, blue
<u>Pseudocrenilabrus multicolor</u>	mouthbrooder, dwarf Egyptian
<u>Pseudocrenilabrus philander</u>	mouthbrooder, South African
<u>Pseudotropheus auratus</u>	cichlid, Nyasa golden
<u>Pseudotropheus aurora</u>	cichlid, aurora
<u>Pseudotropheus brevis</u>	mbuna, silver-blue
<u>Pseudotropheus eduardi</u>	mbuna
<u>Pseudotropheus elegans</u>	elegans
<u>Pseudotropheus elongatus</u>	mbuna, slender
<u>Pseudotropheus fucoides</u>	mbuna
<u>Pseudotropheus fuscus</u>	mbuna
<u>Pseudotropheus lanisticola</u>	mbuna, snail-shell
<u>Pseudotropheus livingstoni</u>	mbuna, Livingstone's
<u>Pseudotropheus lombardoi</u>	kennyi
<u>Pseudotropheus lucerns</u>	mbuna
<u>Pseudotropheus macrophthalmus</u>	mbuna
<u>Pseudotropheus microstoma</u>	tropheops, small-mouthed
<u>Pseudotropheus minutus</u>	mbuna
<u>Pseudotropheus novemfasciatus</u>	novemfasciatus
<u>Pseudotropheus tropheops</u>	tropheops
<u>Pseudotropheus tursiops</u>	mbuna, dolphin
<u>Pseudotropheus williamsi</u>	mbuna, Williams

SCIENTIFIC NAME

COMMON NAME

<u>Pseudotropheus zebra</u>	cichlid, Malawi blue (zebra)
<u>Pterophyllum altum</u>	angelfish, long-finned
<u>Pterophyllum dumerili</u>	angelfish, long-nose
<u>Pterophyllum scalare</u>	angelfish
<u>Reganochromis calliurus</u>	calliurus
<u>Sciaenochromis ahli</u>	cichlid, African
<u>Simochromis diagramma</u>	simochromis, diagonal bar
<u>Spathodus erythron</u>	cichlid, blue-spotted goby
<u>Spathodus marlieri</u>	cichlid, goby
<u>Steatocranus casuarius</u>	cichlid, lionhead
<u>Steatocranus tinanti</u>	cichlid, slender lionhead
<u>Symphysodon aequifasciata</u>	discus, green
<u>aequifasciata</u>	
<u>Symphysodon aequifasciata</u>	discus, brown
<u>axelrodi</u>	
<u>Symphysodon aequifasciata</u>	discus, blue
<u>haraldi</u>	
<u>Symphysodon discus</u>	discus, red (Heckel's)
<u>Taeniacara candidi</u>	cichlid
<u>Tanganicodus irsacae</u>	cichlid, spotfin goby
<u>Teleogramma brichardi</u>	cichlid, Brichard's slender
<u>Teleogramma gracile</u>	cichlid
<u>Teleogramma monogramma</u>	cichlid
<u>Telmatochromis bifrenatus</u>	telmat, striped
<u>Telmatochromis caninus</u>	caninus
<u>Telmatochromis temporales</u>	cichlid, temporalis
<u>Telmatochromis vittatus</u>	telmat, blunt-head
<u>Thysia ansorgii</u>	cichlid, five-spot African
<u>Trematocranus jacobfreibergi</u>	jacobfreibergi
<u>Trematocranus peterdaviesi</u>	cichlid
<u>Tropheus (all species in genus)</u>	cichlid, dwarf
<u>Xenotilapia boulengeri</u>	cichlid
FAMILY Cirrhitidae	
Cirrhitidae (all species in family)	hawkfish
FAMILY Echeneidae	
<u>Echeneis naucrates</u>	sucker, shark; remora, striped
FAMILY Eleotrididae	
<u>Eleotriodes elapoides</u>	goby, silk
<u>Eleotriodes strigata</u>	sleeper, golden-headed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Gobiomorphus australis</u>	gudgeon, striped
<u>Gobiomorphus coxii</u>	gudgeon, Cox's
<u>Hypseleotris aurea</u>	gudgeon, golden
<u>Hypseleotris compressa</u>	gudgeon, carp; fish, empire
<u>Hypseleotris cyprinoides</u>	goby, chameleon
<u>Hypseleotris ejuncida</u>	gudgeon, slender
<u>Hypseleotris galii</u>	gudgeon, firetail
<u>Hypseleotris guentheri</u>	sleeper, chameleon
<u>Hypseleotris kimberleyensis</u>	gudgeon, Barnett River
<u>Hypseleotris klunzingeri</u>	sleeper, Australian pink (goby)
<u>Hypseleotris modestus</u>	gudgeon
<u>Hypseleotris regalis</u>	gudgeon, prince regent
<u>Milyeringa veritas</u>	gudgeon, blind (cave)
<u>Philypnodon grandiceps</u>	gudgeon, big-headed
<u>Prionobutis microps</u>	gudgeon, small-eyed
FAMILY Enoplosidae	
<u>Enoplosus armatus</u>	oldwife
FAMILY Ephippididae	
Ephippididae (all species in family)	spadefish
FAMILY Gerreidae	
Gerreidae (all species in family)	mojarra, spotfin
FAMILY Gobiidae	
Gobiidae (all species in family)	goby
FAMILY Grammidae	
Grammidae (all species in family)	basslet
FAMILY Grammistidae	
Grammistidae (all species in family)	soapfish
FAMILY Haemulidae	
Haemulidae (all species in family)	grunt
FAMILY Helostomatidae	
<u>Helostoma rudolfi</u>	gourami, kissing

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Helostoma temmincki</u>	gourami, kissing
FAMILY Inermiidae <u>Emmelichthys atlanticus</u>	bogita
FAMILY Kuhliidae Kuhliidae (all species in family)	aholehole
FAMILY Kyphosidae Kyphosidae (all species in family)	rudder fish
FAMILY Labridae Labridae (all species in family)	wrasse
FAMILY Lobotidae <u>Datnoides microlepis</u> <u>Datnoides quadrifasciatus</u> <u>Lobotes surinamensis</u>	tiger fish, Siamese tiger fish, many-barred tiger fish
FAMILY Lutjanidae Lutjanidae (all species in family)	snapper
FAMILY Malacanthidae Malacanthidae (all species in family)	tilefish
FAMILY Mastacembelidae <u>Macrognathus aculeatus</u> <u>Macrognathus siamensis</u>	eel, spiny; eel, peacock eel, spiny spot-fin (peacock)
<u>Mastacembelus aculeata</u>	eel, spiny
<u>Mastacembelus argus</u>	eel, spiny
<u>Mastacembelus armatus</u>	eel, white-spotted spiny
<u>Mastacembelus circumcinctus</u>	eel, half-banded spiny
<u>Mastacembelus ellipsifer</u>	eel, spiny
<u>Mastacembelus erythrotaenia</u>	eel, spotted fire
<u>Mastacembelus frenatus</u>	eel, spiny
<u>Mastacembelus moori</u>	eel, spiny
<u>Mastacembelus ophidium</u>	eel, spiny
<u>Mastacembelus pancalus</u>	eel, spiny
<u>Mastacembelus reticulatus</u>	eel, spiny
<u>Mastacembelus siamensis</u>	eel, spot-finned spiny
<u>Mastacembelus smith</u>	eel, false armatus spiny
<u>Mastacembelus tanganicea</u>	eel, spiny

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Mastacembelus zebrinus</u>	eel, zebra spiny (zigzag)
<u>Rhynchobdella aculeata</u>	eel, spiny
FAMILY Microdesmidae	
<u>Nemateleotris decora</u>	firefish, blue
<u>Nemateleotris helfrichi</u>	firefish, purple
<u>Nemateleotris magnificus</u>	firefish
<u>Ptereleotris microlepis</u>	gudgeon, blue
<u>Ptereleotris splendidum</u>	firefish
<u>Ptereleotris tricolor</u>	scissortail
FAMILY Monodactylidae	
Monodactylidae (all species in family)	mono
FAMILY Mugiloididae	
<u>Parapercis schauinslandi</u>	grub fish, red
FAMILY Mullidae	
Mullidae (all species in family)	goatfish
FAMILY Nandidae	
<u>Badis badis badis</u>	badis; fish, dwarf chameleon
<u>Badis badis burmanicus</u>	badis, Burmese
<u>Monocirrhus polyacanthus</u>	leaf fish
<u>Nandus nandus</u>	leaf fish, Asian; nandus
<u>Polycentropsis abbreviata</u>	leaf fish, African
<u>Polycentrus schomburgki</u>	leaf fish, Schomburgk's
FAMILY Nemipteridae	
<u>Scolopsis bilineatus</u>	snapper, two-lined
<u>Scolopsis cancellatus</u>	snapper, yellow stripe
FAMILY Opistognathidae	
Opistognathidae (all species in family)	jawfish
FAMILY Osphronemidae	
<u>Osphronemus gouramy</u>	gourami, giant
FAMILY Pempherididae	
Pempherididae (all species in family)	sweeper

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Pentacerotidae Pentacerotidae (all species in family)	armorhead
FAMILY Percichthyidae <u>Nannoperca vittata</u>	perch, Australian pygmy
FAMILY Percidae <u>Acerina cernua</u> <u>Etheostoma caeruleum</u>	perch, European darter, rainbow
FAMILY Pholidichthyidae <u>Pholidichthys leucotaenia</u>	goby, convict worm
FAMILY Plesiopidae Plesiopidae (all species in family)	betta, marine
FAMILY Pomacanthidae Pomacanthidae (all species in family)	angelfish
FAMILY Pomacentridae Pomacentridae (all species in family)	damsel fish
FAMILY Priacanthidae Priacanthidae (all species in family)	big-eye
FAMILY Pseudochromidae Pseudochromidae (all species in family)	dottyback
FAMILY Scaridae Scaridae (all species in family)	parrotfish
FAMILY Scatophagidae Scatophagidae (all species in family)	scat
FAMILY Sciaenidae <u>Equetus acuminatus</u> <u>Equetus lanceolatus</u> <u>Equetus punctatus</u>	cubbyu; cubbyu, high hat jackknife fish drum, spotted

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Scombridae Scombridae (all species in family)	tuna
FAMILY Scorpididae Scorpididae (all species in family)	stripey
FAMILY Serranidae Serranidae (all species in family)	grouper
FAMILY Sparidae <u>Archosargus probatocephalus</u> <u>Archosargus rhomboidalis</u> <u>Calamus bajonado</u> <u>Calamus calamus</u> <u>Calamus penna</u> <u>Calamus pennatula</u> <u>Diplodus caudimacula</u> <u>Sargus vulgaris</u>	sheepshead, black-barred bream, sea porgy, jolthead porgy, saucereye porgy, sheepshead pluma porgy, roundspot bream, two-banded
FAMILY Theraponidae <u>Therapon jarbua</u>	tigerfish, three-striped
FAMILY Toxotidae <u>Toxotes chatareus</u> <u>Toxotes jaculator</u> <u>Toxotes lorentzi</u> <u>Toxotes oligolepis</u>	archerfish, seven-spot archerfish archerfish, primitive archerfish, few-scaled
FAMILY Tripterygiidae Tripterygiidae (all species in family)	triplefin
ORDER Percopsiformes FAMILY Aphredoderidae <u>Aphredoderus sayanus</u>	perch, pirate
ORDER Pleuronectiformes FAMILY Bothidae <u>Bothus lunatus</u> <u>Bothus mancus</u> <u>Bothus ocellatus</u>	flounder, peacock flounder, tropical flounder, eyed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Paralichthys tropicus</u>	flounder, tropical
<u>Pseudorhombus cinnamoneus</u>	flounder, cinnamon
<p style="margin-left: 40px;">FAMILY Cynoglossidae</p> <p>Cynoglossidae (all species in family)</p>	
<p style="margin-left: 40px;">FAMILY Soleidae</p>	
<u>Achirus errans</u>	sole, Brazilian freshwater
<u>Achirus lineatus</u>	flounder, freshwater
<u>Trinectes maculatus</u>	sole, freshwater
<p style="margin-left: 40px;">ORDER Salmoniformes</p> <p style="margin-left: 80px;">FAMILY Umbridae</p>	
<u>Leptobarbus hoeveni</u>	barb, pink-tailed
<p style="margin-left: 40px;">ORDER Scorpaeniformes</p> <p style="margin-left: 80px;">FAMILY Cottidae</p>	
<u>Cottus bairdi</u>	sculpin, mottled
<p style="margin-left: 40px;">ORDER Siluriformes</p> <p style="margin-left: 80px;">FAMILY Amphiliidae</p>	
<u>Phractura ansorgei</u>	catfish, African whiptailed
<p style="margin-left: 40px;">FAMILY Aspredinidae</p>	
<u>Agmus lyriformia</u>	catfish, lumpy banjo
<u>Aspredo aspredo</u>	catfish
<u>Bunocephalus amaurus</u>	catfish
<u>Bunocephalus amaurus</u>	catfish, banjo
<u>Bunocephalus bicolor</u>	catfish, frying-pan
<u>Bunocephalus coracoideus</u>	catfish, z-color banjo
<u>Bunocephalus kneri</u>	catfish
<p style="margin-left: 40px;">FAMILY Auchenipteridae</p>	
<u>Auchanipterichthys thoracatus</u>	woodcat, zamora
<u>Auchenipterus dumerarae</u>	woodcat, demerara
<u>Centromochlus heckili</u>	woodcat, Heckel's
<u>Pseudauchenipterus nodosus</u>	catfish, black tailband
<u>Pseudepapterus hasemani</u>	woodcat, haseman's
<u>Tatia aulopygia</u>	woodcat, snowflake
<u>Tatia creutzbergi</u>	woodcat, Creutzberg's
<u>Tetranematichthys quadrifilia</u>	woodcat, hi-hat
<u>Trachelyopterichthys taeniatus</u>	woodcat, striped

SCIENTIFIC NAMECOMMON NAME

FAMILY Bagridae

<u>Leiocassis brashnikowi</u>	catfish, Russian
<u>Leiocassis siamensis</u>	catfish, barred Siamese
<u>Mystus micracanthus</u>	catfish, two-spot
<u>Mystus tengara</u>	catfish, Asiatic
<u>Mystus vittatus</u>	catfish
<u>Parauchenipterus galeatus</u>	catfish, starry
<u>Parauchenoglanis guttatus</u>	catfish, African flathead
<u>Parauchenoglanis macrostoma</u>	catfish, African spotted
<u>Pseudobagrus fulvidraco</u>	catfish, tawny dragon

FAMILY Callichthyidae

<u>Aspidoras</u> (all species in genus)	catfish, dwarf armored
<u>Brochis</u> (all species in genus)	catfish, dwarf armored
<u>Callichthys callichthys</u>	catfish, slender armored
<u>Corydoras</u> (all species in genus)	catfish, dwarf armored
<u>Dianema longibarbis</u>	catfish, porthole
<u>Dianema urostriata</u>	catfish, stripe-tailed
<u>Hoplosternum littorale</u>	hoplo; cascudo
<u>Hoplosternum pectorale</u>	catfish
<u>Hoplosternum thoracatum</u>	hoplo, port; atipa

FAMILY Helogenidae

<u>Helogene marmoratus</u>	helogenes, marbled
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FAMILY Ictaluridae

<u>Ictalurus punctatus</u>	catfish, channel
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FAMILY Loricariidae

<u>Ancistrus cirrhus</u>	catfish
<u>Ancistrus dolichopterus</u>	catfish
<u>Ancistrus hoplogenyis</u>	sucker, pearl
<u>Ancistrus lineolatus</u>	bristle-nose
<u>Ancistrus temmincki</u>	bristle-nose, Temminck's
<u>Ancistrus triradiatus</u>	bristle-nose, branched
<u>Cochliodon plecostomoides</u>	catfish, spoon-tooth sucker
<u>Cteniloricaria fowleri</u>	catfish
<u>Cteniloricaria maculata</u>	catfish
<u>Cteniloricaria platystoma</u>	catfish
<u>Farlowella acus</u>	farlowella
<u>Farlowella gracilis</u>	twig fish
<u>Farlowella schreitmülleri</u>	farlowella, royal
<u>Hemiancistrus nicefordi</u>	catfish, clown sucker
<u>Hemiancistrus vittatus</u>	catfish, striped sucker
<u>Hemidonichthyes acispenserinus</u>	catfish

SCIENTIFIC NAMECOMMON NAME

<u>Hypancistrus zebra</u>	plecostomus, zebra
<u>Hypoptopoma inexpectatum</u>	catfish, dwarf sucker
<u>Hypoptopoma guentheri</u>	catfish, dwarf sucker
<u>Hypostomus plecostomus</u>	catfish, sucker
<u>Hypostomus punctatus</u>	catfish
<u>Loricaria filamentosa</u>	catfish, whiptail
<u>Loricaria lanceolata</u>	catfish
<u>Loricaria parva</u>	catfish, whiptail
<u>Microlepidogaster oxyprosis</u>	catfish, dwarf sucker
<u>Monistiancistrus carachama</u>	catfish
<u>Otocinclus affinis</u>	catfish, midget sucker
<u>Otocinclus arnoldi</u>	catfish, Arnold's sucker
<u>Otocinclus flexilis</u>	catfish, sucker imitator
<u>Otocinclus mariae</u>	otocinclus, Maria's
<u>Otocinclus paulinus</u>	otocinclus
<u>Otocinclus vestitus</u>	catfish, Ampiyacu dwarf sucker
<u>Otocinclus vittatus</u>	catfish, striped sucker
<u>Panaque nigrolineatus</u>	panaque; royal plecostomus
<u>Panaque suttoni</u>	plecostomus, blue-eyed
<u>Parancistrus aurantiacus</u>	catfish, sucker
<u>Parotocinclus maculicauda</u>	catfish
<u>Peckoltia arenaria</u>	peckoltia
<u>Peckoltia brevis</u>	catfish, spotted head
<u>Peckoltia oligospila</u>	peckoltia
<u>Peckoltia platyrhyncha</u>	catfish, flat faced
<u>Peckoltia pulcher</u>	catfish, pretty
<u>Peckoltia vittatus</u>	catfish, banded
<u>Plecostomus bolivianus</u>	catfish, Bolivian sucker
<u>Pseudacanthius leopardus</u>	catfish
<u>Pterygoplichthys anisitsi</u>	pleco, snow king
<u>Pterygoplichthys gibbiceps</u>	plecostomus, sailfin
<u>Pterygoplichthys bolivianus</u>	catfish, Bolivian sucker
<u>Rineloricaria castrol</u>	cat, whiptail
<u>Rineloricaria fallax</u>	catfish
<u>Rineloricaria hasemani</u>	catfish
<u>Rineloricaria lanceolata</u>	catfish
<u>Stoneiella leopardus</u>	catfish, orange-trim sucker
<u>Xenocara dolichoptera</u>	catfish, bushy-mouth
FAMILY Mochokidae	
<u>Brachysynodontis batensoda</u>	catfish
<u>Hemisynodontis schall</u>	catfish
<u>Synodontis acanthomias</u>	catfish
<u>Synodontis afro-fischeri</u>	catfish
<u>Synodontis alberti</u>	catfish

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SCIENTIFIC NAME

COMMON NAME

<u>Synodontis albolineatus</u>	catfish
<u>Synodontis angelicus</u>	catfish, polka-dot African
<u>Synodontis angierasi</u>	catfish
<u>Synodontis annectens</u>	catfish
<u>Synodontis ansorgii</u>	catfish
<u>Synodontis arabi</u>	catfish
<u>Synodontis arnaulti</u>	catfish
<u>Synodontis aterrimus</u>	catfish
<u>Synodontis augierasi</u>	catfish
<u>Synodontis bastiani</u>	catfish
<u>Synodontis batensoda</u>	catfish
<u>Synodontis batesi</u>	catfish
<u>Synodontis brichardi</u>	catfish
<u>Synodontis budgetti</u>	catfish
<u>Synodontis camelopardalis</u>	catfish
<u>Synodontis caudalis</u>	catfish
<u>Synodontis caudovittatus</u>	catfish
<u>Synodontis centralis</u>	catfish
<u>Synodontis citernii</u>	catfish
<u>Synodontis clarias</u>	catfish
<u>Synodontis colyeri</u>	catfish
<u>Synodontis congicus</u>	catfish
<u>Synodontis contractus</u>	catfish, David's upside-down
<u>Synodontis courteti</u>	catfish
<u>Synodontis cuangoanus</u>	catfish
<u>Synodontis dageti</u>	catfish
<u>Synodontis davidi</u>	catfish
<u>Synodontis decorus</u>	catfish
<u>Synodontis depauwi</u>	catfish
<u>Synodontis dhonti</u>	catfish
<u>Synodontis dorsomaculatus</u>	catfish
<u>Synodontis eburneensis</u>	catfish
<u>Synodontis eupterus</u>	catfish
<u>Synodontis eurystomus</u>	catfish
<u>Synodontis fascipinna</u>	catfish
<u>Synodontis filamentosus</u>	catfish
<u>Synodontis flavitaeniatus</u>	synodontis, yellow-striped
<u>Synodontis frontosus</u>	catfish
<u>Synodontis fuelleborni</u>	catfish
<u>Synodontis gambiensis</u>	catfish
<u>Synodontis geledensis</u>	catfish
<u>Synodontis gobroni</u>	catfish
<u>Synodontis granulatus</u>	catfish
<u>Synodontis greshoffi</u>	catfish
<u>Synodontis guentheri</u>	catfish
<u>Synodontis guttatus</u>	catfish

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Synodontis haugi</u>	catfish
<u>Synodontis hollyi</u>	catfish
<u>Synodontis holopercnus</u>	catfish
<u>Synodontis humeratus</u>	catfish
<u>Synodontis irsacae</u>	catfish
<u>Synodontis ituriensis</u>	catfish
<u>Synodontis iturii</u>	catfish
<u>Synodontis jallae</u>	squeaker, Jalla's
<u>Synodontis katangae</u>	catfish
<u>Synodontis khartoumensis</u>	catfish
<u>Synodontis koensis</u>	catfish
<u>Synodontis labeo</u>	catfish
<u>Synodontis lacustricolus</u>	catfish
<u>Synodontis leopardinus</u>	squeaker, spotted
<u>Synodontis longirostris</u>	catfish
<u>Synodontis longispinis</u>	catfish
<u>Synodontis loppei</u>	catfish
<u>Synodontis lufirae</u>	catfish
<u>Synodontis macrepipterus</u>	catfish
<u>Synodontis macrodon</u>	catfish
<u>Synodontis macrophthalmus</u>	catfish
<u>Synodontis macrops</u>	catfish
<u>Synodontis macrostigma</u>	squeaker, spotted
<u>Synodontis maculatus</u>	catfish
<u>Synodontis maculipinna</u>	catfish
<u>Synodontis maculosis</u>	catfish
<u>Synodontis marmoratus</u>	catfish
<u>Synodontis matthesi</u>	catfish
<u>Synodontis melanogaster</u>	catfish
<u>Synodontis melanopterus</u>	catfish
<u>Synodontis melanostictus</u>	catfish
<u>Synodontis membranaceus</u>	catfish
<u>Synodontis menanogaster</u>	catfish
<u>Synodontis multimaculatus</u>	catfish
<u>Synodontis multipunctatus</u>	catfish
<u>Synodontis nebulosus</u>	squeaker
<u>Synodontis nigrita</u>	catfish, lace
<u>Synodontis nigriventris</u>	catfish, black-belly upside-down
<u>Synodontis nigromaculatus</u>	catfish, black-dot upside-down
<u>Synodontis notatus</u>	catfish, spotted
<u>Synodontis nummifer</u>	catfish
<u>Synodontis nummifer dshahensis</u>	catfish
<u>Synodontis nyassae</u>	catfish
<u>Synodontis obesus</u>	catfish

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Synodontis ocellatus</u>	catfish
<u>Synodontis ocellifer</u>	catfish
<u>Synodontis omias</u>	catfish
<u>Synodontis ornatipinnis</u>	catfish
<u>Synodontis ornatus</u>	catfish
<u>Synodontis ovidius</u>	catfish
<u>Synodontis pantherinus</u>	catfish
<u>Synodontis pardalis</u>	catfish
<u>Synodontis petricola</u>	catfish
<u>Synodontis pfefferi</u>	catfish
<u>Synodontis pleurops</u>	catfish
<u>Synodontis polydon</u>	catfish
<u>Synodontis polystigma</u>	catfish
<u>Synodontis pulcher</u>	catfish
<u>Synodontis punctifer</u>	catfish
<u>Synodontis punctulatus</u>	catfish
<u>Synodontis rebeli</u>	catfish
<u>Synodontis resupinatus</u>	catfish
<u>Synodontis robbianus</u>	catfish
<u>Synodontis ruandae</u>	catfish
<u>Synodontis ruffigiensis</u>	catfish
<u>Synodontis schall</u>	catfish
<u>Synodontis schoutendeni</u>	catfish
<u>Synodontis septentis</u>	catfish
<u>Synodontis serratus</u>	catfish
<u>Synodontis smiti</u>	catfish
<u>Synodontis soloni</u>	catfish
<u>Synodontis sorex</u>	catfish
<u>Synodontis stendachneri</u>	catfish
<u>Synodontis tenuis</u>	catfish
<u>Synodontis tessmanni</u>	catfish
<u>Synodontis thamalakanensis</u>	catfish
<u>Synodontis tholloni</u>	catfish
<u>Synodontis thysi</u>	catfish
<u>Synodontis tourei</u>	catfish
<u>Synodontis unicolor</u>	catfish
<u>Synodontis velifer</u>	catfish
<u>Synodontis vermiculatus</u>	catfish
<u>Synodontis victoriae</u>	catfish
<u>Synodontis violaceus</u>	catfish
<u>Synodontis vittatus</u>	catfish, striped
<u>Synodontis wamiensis</u>	catfish
<u>Synodontis waterfoti</u>	catfish
<u>Synodontis wernerii</u>	catfish
<u>Synodontis woosnami</u>	catfish
<u>Synodontis xiphias</u>	catfish

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Synodontis zambezensis</u>	catfish
<u>Synodontis zambezensis</u> <u>rukwaensis</u>	catfish
<u>Synodontis zanzibaricus</u>	catfish
FAMILY Pangasiidae	
<u>Pangasius sutchi</u>	shark, Siamese
FAMILY Pimelodidae	
<u>Microglanis parahybae</u>	catfish, dwarf marbled
<u>Microglanis poecilus</u>	catfish, dwarf marbled
<u>Pimelodella dorseyi</u>	pimelodella, Dorsey's
<u>Pimelodella gracilis</u>	pimelodella, slender
<u>Pimelodella hartwelli</u>	pimelodella
<u>Pimelodella imitator</u>	catfish
<u>Pimelodella laticeps</u>	pimelodella, flat-head
<u>Pimelodella linami</u>	pimelodella, Linam's
<u>Pimelodella metae</u>	pimelodella, Rio Meta
<u>Pimelodella parnahybae</u>	pimelodella, parnahyba
<u>Pimelodella pictus</u>	catfish, pictus
<u>Pimelodella rambarrani</u>	catfish
<u>Pimelodus albofasciatus</u>	pimelodus, banded
<u>Pimelodus clarias</u>	pimelodus, spotted
<u>Pimelodus maculatus</u>	pimelodus, spotted
<u>Pimelodus ornatus</u>	pimelodus, ornate
<u>Pimelodus pictus</u>	pimelodus, angelicus
<u>Pinirampus pirinampu</u>	catfish, long-finned
<u>Sciades marmoratus</u>	catfish, marbled
<u>Sciades pictus</u>	catfish, painted
<u>Sorubim lima</u>	catfish, shovelnose
<u>Sorubimichthys planiceps</u>	catfish, spotted shovelnose
FAMILY Schilbeidae	
<u>Eutropiellas debauwi</u>	catfish, three-striped glass
<u>Parailia longifilis</u>	catfish, mottled glass
<u>Platytrapius siamensis</u>	catfish
<u>Schilbe marmoratus</u>	catfish, African shoulder spot
<u>Schilbe mystus</u>	catfish, striped schilbe
<u>Schilbe uranoscopus</u>	catfish, silver schilbe
FAMILY Siluridae	
<u>Kryptopterus bicirrhys</u>	catfish, glass
<u>Kryptopterus macrocephalus</u>	catfish, poor man's glass
<u>Ompok bimaculatus</u>	catfish, one-spot glass

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Ompok sabanus</u>	catfish
ORDER Tetraodontiformes	
FAMILY Balistidae	
Balistidae (all species in family)	leatherjacket
FAMILY Diodontidae	
Diodontidae (all species in family)	porcupinefish
FAMILY Monacanthidae	
Monacanthidae (all species in family)	filefish
FAMILY Ostraciidae	
Ostraciidae (all species in family)	boxfish
FAMILY Tetraodontidae	
Tetraodontidae (all species in family)	puffer
FAMILY Triodontidae	
<u>Triodon macropterus</u>	puffer, three-toothed

BIRDS

(After Sibley and Monroe 1990)

PHYLUM Chordata	
CLASS Aves	
ORDER Columbiformes	
FAMILY Columbidae	
<u>Chalcophaps indica</u>	dove, emerald
<u>Columba leuconota</u>	pigeon, snow
<u>Columba picazuro</u>	pigeon, Picazuro
<u>Columbina minuta</u>	dove, plain-breasted ground
<u>Columbina squammata</u>	dove, scaled
<u>Gallicolumba criniger</u>	dove, Bartlett's; Mindinao bleeding-heart
<u>Gallicolumba luzonica</u>	dove, Luzon bleeding-heart
<u>Geopelia cuneata</u>	dove, diamond
<u>Geopelia striata</u>	dove, zebra (barred)

SCIENTIFIC NAME

COMMON NAME

<u>Geophaps lophotes</u>	(barred shouldered) pigeon, crested
<u>Goura victoria</u>	pigeon, Victoria crowned
<u>Macropygia magna</u>	dove, cuckoo large (greater)
<u>Oena capensis</u>	dove, cape (masked) (namaqua)
<u>Phaps chalcoptera</u>	pigeon, bronzewing
<u>Streptopelia bitorquata</u>	dove, Javanese collared (Javanese turtle)
<u>Streptopelia capicola</u>	dove, ring-necked (Chinese) (lace-necked)
<u>Streptopelia chinensis</u>	dove, white sacred (spotted)
<u>Streptopelia decaocto</u>	dove, collared
<u>Streptopelia roseogrisea risoria</u>	dove, ringed turtle (domesticated form)
<u>Turtur chalcospilos</u>	dove, emerald-spotted wood
FAMILY Pteroclididae	
<u>Pterocles exustus</u>	sandgrouse, Indian (chestnut-bellied)
ORDER Galliformes	
FAMILY Numididae	
<u>Acryllium vulturinum</u>	guineafowl, vulturine
FAMILY Odontophoridae	
<u>Callipepla californicus</u> (= <u>Lophortyx californicus</u>)	quail, California
<u>Callipepla gambelii</u> (= <u>Lophortyx gambelii</u>)	quail, Gambel's
<u>Callipepla squamata</u>	quail, scaled
<u>Colinus</u> (all species in genus)	bobwhites
<u>Cyrtonyx montezumae</u>	quail, Montezuma
<u>Oreortyx picta</u>	quail, mountain
FAMILY Phasianidae	
<u>Alectoris barbara</u>	partridge, barbary
<u>Alectoris chukar</u>	partridge, chukar
<u>Alectoris rufa</u>	partridge, red-legged
<u>Ammoperdix griseogularis</u>	partridge, see-see
<u>Argusianus argus</u>	argus, great
<u>Bambusicola fytchii</u>	partridge, mountain bamboo
<u>Bambusicola thoracica</u>	partridge, Chinese bamboo

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Catreus wallichii</u>	pheasant, cheer
<u>Chrysolophus</u> (all species in genus)	pheasant, ruffed
<u>Coturnix chinensis</u>	quail, blue-breasted
<u>Coturnix japonica</u>	quail, Japanese
<u>Crossoptilon</u> (all species in genus)	pheasant, eared
<u>Francolinus</u> (all species in genus)	francolins
<u>Gallus</u> (all species in genus)	junglefowl
<u>Ithaginis cruentus</u>	pheasant, blood
<u>Lophophorus</u> (all species in genus)	pheasant, monal
<u>Lophura</u> (all species in genus)	gallopheasant
<u>Meleagris gallopavo</u>	turkey, wild common
<u>Numida meleagris</u>	guinea-fowl, helmeted
<u>Pavo</u> (all species in genus)	peafowl
<u>Perdix perdix</u>	partridge, grey
<u>Phasianus colchicus</u>	pheasant, common
<u>Polyplectron</u> (all species in genus)	pheasant, peacock
<u>Pucrasia macrolopha</u>	pheasant, koklass
<u>Rheinardia ocellata</u>	argus, crested
<u>Rollulus roulroul</u>	partridge, crested
<u>Syrmaticus</u> (all species in genus)	pheasant, long-tailed
<u>Tragopan</u> (all species in genus)	pheasant, tragopan
ORDER Passeriformes	
FAMILY Alaudidae	
<u>Melanocorypha mongolica</u>	lark, Mongolian
FAMILY Corvidae	
<u>Oriolus chinensis</u> (males only)	oriole, black-naped
<u>Oriolus oriolus</u> (males only)	oriole, Eurasian golden
<u>Pericrocotus flammeus</u>	minivet, scarlet
FAMILY Fringillidae	
<u>Carduelis carduelis</u> (males only)	goldfinch, European
<u>Carpodacus erythrinus</u> (males only)	rosefinch, common
<u>Coccothraustes coccothraustes</u> (males only)	hawkfinch
<u>Coryphospingus pileatus</u> (males only)	finch, pileated
<u>Emberiza aureola</u>	bunting, yellow-breasted
<u>Emberiza cioides</u>	bunting, meadow (Hojiro)

SCIENTIFIC NAMECOMMON NAME

<u>Emberiza elegans</u>	bunting, elegant (yellow-throated)
<u>Emberiza rustica</u>	bunting, rustic
<u>Emberiza sulphurata</u>	bunting, yellow
<u>Emberiza tristrami</u>	bunting, Tristram's
<u>Gubernatrix cristata</u>	cardinal, yellow
<u>Paroaria capitata</u>	cardinal, yellow-billed
<u>Paroaria dominicana</u>	cardinal, pope (red-cowled)
<u>Paroaria gularis</u>	cardinal, red-capped
<u>Serinus canaria</u>	canary, island
<u>Serinus leucopygius</u>	seed-eater, white-rumped
<u>Serinus mozambicus</u>	canary, yellow-fronted
<u>Sicalis flaveola</u> (males only)	finch, saffron
<u>Tiaris canora</u>	finch, Cuban grassquit (Cuban melodius)
<u>Tiaris olivacea</u>	finch, yellow-faced grassquit (Cuban olive)
<u>Volatinia jacarina</u>	grassquit, blue-black
FAMILY Irenidae	
<u>Irena puella</u>	bluebird, Asian fairy
FAMILY Muscicapidae	
<u>Copsychus malabaricus</u>	shama, white-rumped
<u>Copsychus saularis</u>	thrush, Dayal; oriental magpie robin
<u>Gracula religiosa</u>	myna, hill
<u>Myiophonus horsfieldii</u>	thrush, whistling Malabar
FAMILY Passeridae	
<u>Amadina erythrocephala</u>	finch, red-headed
<u>Amadina fasciata</u> (males only)	finch, cut-throat (ribbon)
<u>Amandava amandava</u>	finch, red avadavat
<u>Amandava subflava</u>	waxbill, zebra
<u>Chloebia gouldiae</u>	finch, Gouldian
<u>Emblema pictum</u>	finch, painted (emblem)
<u>Erythrura cyaneovirens</u>	parrotfinch, red-headed
<u>Erythrura prasina</u>	parrotfinch, pintailed
<u>Erythrura psittacea</u>	parrotfinch, red-headed
<u>Erythrura trichroa</u>	parrotfinch, blue-faced
<u>Erythrura viridifacies</u> (males only)	parrotfinch, green-faced
<u>Estrilda astrild</u>	finch, St. Helena waxbill (common waxbill)
<u>Estrilda atricapilla</u>	waxbill, black-headed
<u>Estrilda caerulescens</u>	waxbill, lavender

SCIENTIFIC NAMECOMMON NAME

<u>Estrilda erythronotos</u>	waxbill, black-cheeked
<u>Estrilda melpoda</u>	waxbill, orange-cheeked
<u>Estrilda troglodytes</u>	waxbill, black-rumped
<u>Euplectes afer</u>	bishop, yellow-crowned
<u>Euplectes franciscanus</u>	bishop, orange
<u>Euplectes hordeaceus</u>	bishop, black-winged
<u>Euplectes orix</u>	bishop, red
<u>Heteromunia pectoralis</u>	munia, pictorella
<u>Hypargos niveoguttatus</u>	finch, Peter's twinspace
<u>Lagonosticta rara</u>	finch, black-bellied
<u>Lagonosticta rubricata</u>	firefinch, African
<u>Lagonosticta senegala</u>	firefinch, red-billed
<u>Lagonosticta striata</u>	munia, Bengalese;
<u> acutucauda</u>	white-rumped munia
<u>Lonchura cantans</u>	silver-bill, African
<u>Lonchura cucullata</u>	munia, bronze
<u>Lonchura ferruginosa</u>	munia, white-capped
<u>Lonchura flaviprymna</u>	munia, yellow-rumped
<u>Lonchura malacca</u>	munia, black-headed
<u>Lonchura punctulata</u>	munia, scaly-breasted
<u>Lonchura striata</u>	munia, white-rumped
<u>Neochmia modesta</u>	finch, plum-headed
<u>Neochmia phaeton</u>	finch, crimson (Australian fire)
<u>Neochmia ruficauda</u>	finch, star
<u>Neochmia temporalis</u>	firetail, red-browed
<u>Poephila acuticauda</u>	finch, long-tailed
<u>Poephila cincta</u>	finch, black-throated
<u>Poephila personata</u>	finch, masked
<u>Pytilia afra</u>	finch, orange-winged pytilia
<u>Pytilia melba</u>	finch, melba (green-winged pytilia)
<u>Pytilia phoenicoptera</u>	finch, red-winged pytilia
<u>Stagonopleura guttata</u>	firetail, diamond
<u>Taeniopygia guttata</u>	finch, zebra
<u>Uraeginthus bengalus</u>	finch, cordon bleu (red-cheeked)
<u>Uraeginthus cyanocephala</u>	finch, blue-capped cordon bleu
<u>Uraeginthus granatina</u>	grenadier, common
<u>Uraeginthus ianthinogaster</u>	grenadier, purple
<u>Vidua macroura</u>	whydah, pin-tailed
<u>Vidua paradisaea</u>	whydah, eastern paradise

SCIENTIFIC NAMECOMMON NAME

FAMILY Sylviidae

<u>Cettia diphone</u>	bush-warbler, Japanese
<u>Garrulax albogularis</u>	laughingthrush, white-throated
<u>Garrulax canorus</u>	hwamei
<u>Garrulax chinensis</u> (males only)	laughingthrush, black-throated
<u>Garrulax leucolophus</u> (males only)	laughingthrush, white-crested
<u>Leiothrix argentauris</u> (males only)	mesia, silver-eared
<u>Leiothrix lutea</u>	leiothrix, red-billed
<u>Minla cyanouroptera</u>	minla, blue-winged

ORDER Psittaciformes

FAMILY Psittacidae

<u>Agapornis</u> (all species in genus)	lovebird
<u>Alisterus</u> (all species in genus)	parrot, king
<u>Amazona</u> (all species in genus)	parrot, Amazon
<u>Anodorhynchus</u> (all species in genus)	macaw
<u>Aprosmictus</u> (all species in genus)	parrot
<u>Ara</u> (all species in genus)	macaw
<u>Aratinga</u> (all species in genus except <u>A. nana astec</u>)	parakeet
<u>Bolborhynchus lineola</u>	parakeet, barred
<u>Cacatua</u> (all species in genus)	"cockatoo, white"
<u>Callocephalon fimbriatum</u>	cockatoo, Gang-gang
<u>Calyptorhynchus</u> (all species in genus)	"cockatoo, black"
<u>Cyanoliseus patagonus</u>	conure, Patagonian; burrowing parakeet
<u>Cyanoramphus</u> (all species in genus)	parakeet
<u>Deropterus accipitrinus</u>	parrot, hawk-headed; red-fan parrot
<u>Eclectus roratus</u>	parrot, eclectus
<u>Elophus roseicapillus</u>	Galah
<u>Enicognathus</u> (all species in genus)	conure, slender-billed; parakeet
<u>Eunymphicus cornutus</u>	parakeet, horned
<u>Leptosittaca branickii</u>	parakeet, golden-plumed
<u>Melopsittacus undulatus</u>	parakeet, budgerigar
<u>Neophema</u> (all species in genus)	parrot
<u>Nymphicus [holandicus] hollandicus</u>	cockatiel

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Pionus</u> (all species in genus)	parrot
<u>Platycercus</u> (all species in genus)	rosella; ringneck
<u>Poicephalus</u> (all species in genus)	parrot
<u>Polytelis</u> (all species in genus)	parrot
<u>Probosciger aterrimus</u>	cockatoo, Palm
<u>Psephotus</u> (all species in genus)	parrot
<u>Psittacula alexandri</u>	parakeet, moustache (red-breasted)
<u>Psittacula cyanocephala</u>	parakeet, plum-headed
<u>Psittacula derbiana</u>	parakeet, Lord Derby's (Derbyan's)
<u>Psittacula eupatria</u>	parakeet, Alexandrine
<u>Psittacula himalayana</u>	parakeet, slaty-headed
<u>Psittacula roseata</u>	parakeet, rose-headed (blossom-headed)
<u>Psittacus erithacus</u>	parrot, grey
<u>Purpureicephalus spurius</u>	parrot, red-capped
<u>Pyrrhura</u> (all species in genus)	parakeet
<u>Tanygnathus</u> (all species in genus)	parrot

ORDER Turniciformes	
FAMILY Turnicidae	
Turnicidae (all species in family)	buttonquail

MAMMALS

PHYLUM Chordata	
CLASS Mammalia	
ORDER Rodentia	
FAMILY Caviidae	
<u>Cavia cobaya</u> (=Cavia porcellus)	guinea pig
FAMILY Chinchillidae	
<u>Chinchilla lanigera</u>	chinchilla
FAMILY Muridae	
<u>Mus musculus</u>	mice, domesticated
<u>Rattus</u> sp.	rat, domesticated

LIST OF RESTRICTED ANIMALS

November 28, 2006

PART A: FOR RESEARCH AND EXHIBITION

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
INVERTEBRATES	
PHYLUM Annelida	
CLASS Hirudinea	
ORDER Gnathobdellida	
FAMILY Hirudinidae	
<u>Hirudo medicinalis</u>	leech, medicinal
ORDER Rhynchobdellae	
FAMILY Glossiphoniidae	
<u>Helobdella triserialis</u>	leech, small snail
CLASS Oligochaeta	
ORDER Haplotaxida	
FAMILY Euchytraeidae	
Enchytraeidae (all species in family)	worm, white
FAMILY Eudrilidae	
<u>Helodrilus foetidus</u>	earthworm
FAMILY Lumbricidae	
<u>Lumbricus terrestris</u>	earthworm
<u>Allophora</u> (all species in genus)	earthworm
CLASS Polychaeta	
ORDER Phyllodocida	
FAMILY Nereidae	
<u>Nereis japonica</u>	lugworm

SCIENTIFIC NAMECOMMON NAME

PHYLUM Arthropoda

CLASS Arachnida

ORDER Acari

FAMILY Phytoseiidae

Iphiseius degenerans

predator, spider mite

Mesoseiulus longipes

predator, spider mite

Mesoseiulus macropilis

predator, spider mite

Neoseiulus californicus

predator, spider mite

Neoseiulus longispinosus

predator, spider mite

Typhlodromus occidentalis

mite, western predatory

FAMILY Tetranychidae

Tetranychus lintearius

biocontrol agent, gorse

CLASS Crustacea

ORDER Amphipoda

FAMILY Hyalidae

Parhyale hawaiiensis

amphipod, marine

ORDER Anomura

FAMILY Porcellanidae

Petrolisthes cabrolloi

crab, porcelain

Petrolisthes cinctipes

crab, porcelain

Petrolisthes elongatus

crab, porcelain

Petrolisthes eriomerus

crab, porcelain

Petrolisthes gracilis

crab, porcelain

Petrolisthes granulatus

crab, porcelain

Petrolisthes japonicus

crab, porcelain

Petrolisthes laevigatus

crab, porcelain

Petrolisthes manimaculis

crab, porcelain

Petrolisthes tuberculatus

crab, porcelain

Petrolisthes violaceus

crab, porcelain

ORDER Cladocera

FAMILY Daphnidae

Ceriodaphnia dubia

flea, water

ORDER Mysidacea

FAMILY Mysidae

Mysidopsis bahia

shrimp, mysid

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
CLASS Insecta	
ORDER Coleoptera	
FAMILY Apionidae	
<u>Apion scutellare</u>	biocontrol agent, gorse
FAMILY Buprestidae	
<u>Lius poseidon</u>	biocontrol agent, clidemia
FAMILY Chrysomelidae	
<u>Chlamisus gibbosa</u>	biocontrol agent, blackberry
FAMILY Coccinellidae	
<u>Delphastus pusillus</u>	predator, spiraling whitefly
<u>Hippodamia convergens</u>	beetle, convergent lady
<u>Nephaspis oculatus</u>	predator, spiraling whitefly
<u>Nephaspis bicolor</u>	predator, spiraling whitefly
<u>Stethorus nigripes</u>	predator, spider mites
<u>Stethorus picipes</u>	predator, spider mites
FAMILY Curculionidae	
<u>Acythopeus</u> sp. 1	biocontrol agent, ivy gourd
<u>Acythopeus</u> sp. 2	biocontrol agent, ivy gourd
<u>Acythopeus</u> sp. 3	biocontrol agent, ivy gourd
<u>Auletobius convexifrons</u>	biocontrol agent, firetree
<u>Gymnaetron tetrum</u>	biocontrol agent, common mullein
FAMILY Scarabaeidae	
<u>Euoniticellus intermedius</u>	predator, hornfly
<u>Onitis vanderkelleni</u>	predator, horn fly
ORDER Diptera	
FAMILY Chamaemyiidae	
<u>Leucopis</u> (all species in subgenus)	predator
FAMILY Drosophilidae	
<u>Drosophila</u> (all species in genus)	flies, pomace
<u>Zaprionothrica</u> sp.	biocontrol agent, banana poka

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Lonchaeidae <u>Dasiops curubae</u>	biocontrol agent, banana poka
FAMILY Muscidae <u>Musca domestica</u>	house fly
FAMILY Tephritidae <u>Ceratitus capitata</u> <u>Urophora stylata</u>	fly, Mediterranean fruit biocontrol agent, bull thistle
ORDER Heteroptera FAMILY Anthocoridae <u>Orius tristicolor</u>	bug, minute pirate
ORDER Homoptera FAMILY Eriococcidae <u>Tectococcus ovatus</u>	biocontrol agent, strawberry guava
ORDER Hymenoptera FAMILY Aphelinidae <u>Aphelinus</u> (all species in genus) <u>Cales noacki</u> <u>Encarsia formosa</u> <u>Encarsia guadeloupae</u> <u>Encarsia ?haitiensis</u> <u>Encarsia lutea</u> <u>Encarsia mineoi</u> <u>Encarsia pergandiella</u> <u>Mesidia</u> (all species in genus) <u>Mesidiopsis</u> (all species in genus) <u>Protaphelinus</u> (all species in genus)	parasite, aphid parasite, woolly whitefly parasite, greenhouse whitefly parasite, spiraling whitefly parasite, spiraling whitefly parasite, sweetpotato whitefly parasite, sweetpotato whitefly parasite, greenhouse whitefly parasite, aphid parasite, aphid parasite, aphid
FAMILY Aphidiidae Aphidiidae (all species in family)	parasite, aphid

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Bethylidae	
<u>Cephalonomia stefanoderis</u> (lab-reared strains)	parasite, tropical nut borer
<u>Prorops nasuta</u> (lab-reared strains)	parasite, tropical nut borer
FAMILY Braconidae	
<u>Apanteles gelechiidivorus</u>	parasite, tomato pinworm
<u>Apanteles scutellaris</u>	parasite, tomato pinworm
<u>Diachasmimorpha tryoni</u>	wasp, parasitic
<u>Fopius ceratitivorus</u>	biocontrol agent, Mediterranean fruit fly
<u>Heterospilus coffeicola</u> (lab-reared strains)	parasite, tropical nut borer
<u>Opius dissitus</u>	parasite, leafminer
<u>Opius dimidiatus</u>	parasite, leafminer
<u>Orgilus elasmopalpi</u>	parasite, lesser cornstalk borer
<u>Parahormius pallidipes</u>	parasite, tomato pinworm
<u>Pseudapanteles dignus</u>	parasite, tomato pinworm
<u>Psytallia insignipennis</u>	parasite, Medfly
FAMILY Cynipidae	
<u>Ganaspidium utilis</u>	parasite, leafminer
FAMILY Encyrtidae	
<u>Copidosoma truncatellum</u>	parasite, green garden loopers
<u>Psyllaephagus yaseeni</u>	parasite, leucaena psyllid
<u>Zeteticontus utilis</u>	parasite, souring beetles
FAMILY Eulophidae	
<u>Chrysocharis oscinidis</u>	parasite, leafminer
<u>Chrysonotomyia punctiventris</u>	parasite, leafminer
<u>Diaulinopsis callichroma</u>	parasite, leafminer
<u>Diglyphus begini</u>	parasite, leafminer
<u>Horismenus elineatus</u>	parasite, lesser cornstalk borer
<u>Pediobius acantha</u>	parasite, leafminer
<u>Phymasticus coffea</u> (lab-reared strains)	parasite, tropical nut borer
<u>Sympiesis stigmatipennis</u>	parasite, tomato pinworm
<u>Tetrastichus brontispae</u>	parasite, blue coconut leaf beetle
FAMILY Ichneumonidae	
<u>Diadegma aemiclausum</u>	parasite, diamondback moth
<u>Diadegma collaris</u>	parasite, diamondback moth

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Platygasteridae <u>Amitus ?spiniferus</u>	parasite, woolly whitefly
FAMILY Pteromalidae <u>Halticoptera patellana</u>	parasite, leafminer
FAMILY Tenthredinidae <u>Priophorus morio</u>	biocontrol agent, blackberry
ORDER Isoptera FAMILY Rhinotermitidae <u>Coptotermes formosanus</u>	termite, Formosan subterranean
ORDER Lepidoptera FAMILY Carposinidae <u>Carposinia bullata</u>	biocontrol agent, Koster's curse
FAMILY Coleophoridae <u>Coleophora klimeschiella</u> <u>Coleophora parthenica</u>	biocontrol agent, Russian thistle biocontrol agent, Russian thistle
FAMILY Crambidae <u>Pyrausta perelegans</u>	biocontrol agent, banana poka
FAMILY Diptidae <u>Josia ligata</u> <u>Josia fluonia</u>	biocontrol agent, banana poka biocontrol agent, banana poka
FAMILY Gracillariidae <u>Caloptilia schinella</u> <u>Phyllonorycter myricae</u>	biocontrol agent, firetree biocontrol agent, firetree
FAMILY Momphidae <u>Mompha trithalama</u>	biocontrol agent, Koster's curse

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Noctuidae	
<u>Antiblemma acclinalis</u>	biocontrol agent, Koster's curse
<u>Cucullia verbasci</u>	biocontrol agent, common mullein
FAMILY Notodontidae	
<u>Cyanotricha necyria</u>	biocontrol agent, banana poka
FAMILY Oecophoridae	
<u>Agonopterix ulicetella</u>	biocontrol agent, gorse
FAMILY Pyralidae	
<u>Ephestia kuehniella</u>	moth, Mediterranean flour
<u>Galleria mellonella</u>	moth, greater wax
<u>Pempelia genistella</u>	biocontrol agent, gorse
FAMILY Scythrididae	
<u>Scythris gallicella</u>	biocontrol agent, gorse
FAMILY Sesiidae	
<u>Melittia oedipus</u>	biocontrol agent, ivy gourd
<u>Pennisetia marginata</u>	biocontrol agent, blackberry
FAMILY Tortricidae	
<u>Cryptophlebia ombrodelta</u>	moth, litchi fruit
[ORDER Orthoptera]	
[FAMILY Gryllidae]	
<u>[Acheta domesticus]</u>	[cricket, house]
ORDER Thysanoptera	
FAMILY Thripidae	
<u>Scolothrips sexmaculatus</u>	thrips, sixspotted
<u>Sericothrips staphylinus</u>	biocontrol agent, gorse
CLASS Crustacea	
ORDER Decapoda	
FAMILY Alpheidae	
<u>Athanas</u> (all species in genus)	shrimp, anemone

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Cambaridae	
<u>Cambarus</u> (all species in genus)	crayfish
FAMILY Coenobitidae	
<u>Birgus latro</u>	crab, coconut
<u>Coenobita brevimanus</u>	crab, hermit
<u>Coenobita perlatus</u>	crab, hermit
FAMILY Gecarcinidae	
<u>Cardisoma carnifex</u>	crab, land
<u>Cardisoma guanhumi</u>	crab, great land
<u>Gecarcoides lalandii</u>	crab, land
FAMILY Hippolytidae	
<u>Thor amoinessis</u>	shrimp, anemone
<u>Thor paschalis</u>	shrimp, anemone
FAMILY Majidae	
<u>Mithrax spinosissimus</u>	crab, herbivorous; spider, spiny
FAMILY Ocypodidae	
<u>Uca</u> (all species in genus)	crab, fiddler
FAMILY Palaemonidae	
<u>Periclimenes brevicarpalis</u>	shrimp, anemone
<u>Periclimenes longirostris</u>	shrimp, anemone
<u>Periclimenes ornatus</u>	shrimp, anemone
<u>Periclimenes paraornatus</u>	shrimp, anemone
<u>Periclimenes tunipes</u>	shrimp, anemone
CLASS Merostomata	
ORDER Xiphosura	
FAMILY Limulidae	
<u>Limulus polyphemus</u>	crab, horseshoe

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
PHYLUM Chordata CLASS Ascidiacea ORDER Aplousobranchia FAMILY Didemnidae <u>Lissoclinum patellum</u>	tunicates (sea squirts)
PHYLUM Cnidaria CLASS Anthozoa ORDER Actinaria FAMILY Actiniidae Actiniidae (all species in family)	anemone, sea
FAMILY Edwardsiidae <u>Nematostella vectensis</u>	anemone, starlet sea
FAMILY Stichodactylidae Stichodactylidae (all species in family)	anemone, sea
FAMILY Thalassianthidae Thalassianthidae (all species in family)	anemone, sea
ORDER Alcyonacea FAMILY Acanthogorgiidae Acanthogorgiidae (all species in family)	gorgonian
FAMILY Alcyoniidae Alcyoniidae (all species in family, except <u>Sarcophyton ehrenbergi</u> , <u>S. glaucum</u> , <u>S. trocheliophorum</u>)	coral, leather
FAMILY Asterozoniidae Asterozoniidae (all species in family)	coral, leather
FAMILY Briareidae Briareidae (all species in family)	gorgonian
FAMILY Clavulariidae Clavulariidae (all species in family)	polyp, star

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Cornulariidae Cornulariidae (all species in family)	polyp, star
FAMILY Ellisellidae Ellisellidae (all species in family)	gorgonian
FAMILY Gorgoniidae Gorgoniidae (all species in family)	gorgonian
FAMILY Isidadae Isidadae (all species in family)	gorgonian
FAMILY Melithaeidae Melithaeidae (all species in family)	gorgonian
FAMILY Nephtheidae Nephtheidae (all species in family)	coral, tree
FAMILY Nidaliidae Nidaliidae (all species in family)	coral, tree
FAMILY Paralcyniidae Paralcyniidae (all species in family)	coral, Christmas tree
FAMILY Subergordiidae Subergordiidae (all species in family)	gorgonian
FAMILY Tubiporidae Tubiporidae (all species in family)	coral, red pipe organ
FAMILY Xeniidae Xeniidae (all species in family)	coral, pulse
ORDER Antipatharia Antipatharia (all species in order)	coral, black and whip
ORDER Ceriantharia Ceriantharia (all species in order)	anemone, tube

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Corallimorpharia	
FAMILY Discosomatidae	
Discosomatidae (all species in family)	anemone, mushroom
FAMILY Ricordeidae	
Ricordeidae (all species in family)	anemone, mushroom
ORDER Helioporacea	
FAMILY Helioporidae	
<u>Heliopora coerulea</u>	coral, blue
ORDER Pennatulacea	
Pennatulacea (all species in order)	sea pen
ORDER Scleractinia	
FAMILY Acroporidae	
Acroporidae (all species in family, except <u>Acropora aspersa</u> , <u>A. austera</u> , <u>A. elseyi</u> , <u>A. formosa</u> , <u>A. microphthalma</u> , <u>A. nana</u>)	coral, staghorn
FAMILY Agariciidae	
Agariciidae (all species in family)	coral
FAMILY Astrocoeniidae	
Astrocoeniidae (all species in family)	coral
FAMILY Caryophylliidae	
Caryophylliidae (all species in family)	coral
FAMILY Dendrophylliidae	
Dendrophylliidae (all species in family)	coral
FAMILY Faviidae	
Faviidae (all species in family)	coral
FAMILY Fungiidae	
Fungiidae (all species in family)	coral, mushroom
FAMILY Merulinidae	
Merulinidae (all species in family)	coral

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Mussidae Mussidae (all species in family)	coral
FAMILY Oculinidae Oculinidae (all species in family)	coral
FAMILY Pectiniidae Pectiniidae (all species in family)	coral
FAMILY Pocilloporidae Pocilloporidae (all species in family)	coral
FAMILY Poritidae Poritidae (all species in family)	coral
FAMILY Siderastreidae Siderastreidae (all species in family)	coral
FAMILY Trachyphylliidae Trachyphylliidae (all species in family)	coral
ORDER Zoantharia	
FAMILY Epizoanthidae Epizoanthidae (all species in family)	polyp, button
FAMILY Parazoanthidae Parazoanthidae (all species in family)	polyp, button
FAMILY Zoanthidae Zoanthidae (all species in family)	polyp, button
CLASS Hydrozoa	
ORDER Hydroidea	
FAMILY Stylasteridae Stylasteridae (all species in family)	coral, lace

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
CLASS Scyphozoa ORDER Rhizostomeae Rhizostomeae (all species in order)	jellyfish
ORDER Semaestomeae Semaestomeae (all species in order)	jellyfish
PHYLUM Echinodermata CLASS Crinoidea Crinoidea (all species in class)	crinoid
CLASS Echinoidea Echinoidea (all species in class)	echinoderm
PHYLUM Echiuroidea CLASS Echiura ORDER Xenopneusta FAMILY Urechidae <u>Urechis caupo</u>	worm, innkeeper
PHYLUM Mollusca CLASS Bivalvia ORDER Arcoida FAMILY Arcidae <u>Anadara maculosa</u>	clam, Fiji
ORDER Veneroida FAMILY Veneridae <u>Gafarium tumidum</u>	clam, Fiji
CLASS Cephalopoda ORDER Nautilida FAMILY Nautilidae <u>Nautilus belauensis</u> <u>Nautilus pompilius</u>	nautilus nautilus

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Octopoda	
FAMILY Octopodidae	
<u>Octopus</u> sp. 19 [Norman 2000]	octopus, mimic
<u>Octopus</u> sp. 20 [Norman 2000]	octopus, "Wunderpus"
ORDER Sepioidea	
FAMILY Idiosepiidae	
<u>Idiosepius paradoxus</u>	squid, northern pygmy
<u>Idiosepius pygmaeus</u>	squid, two-tone pygmy
FAMILY Sepiadariidae	
<u>Sepioloidea lineolata</u>	squid, striped pyjama
FAMILY Sepiidae	
<u>Sepia</u> (all species in genus)	cuttlefish
ORDER Teuthoidea	
FAMILY Loliginidae	
<u>Sepioteuthis lessoniana</u>	squid, baby
CLASS Gastropoda	
ORDER Anaspidea	
FAMILY Aplysiidae	
<u>Aplysia californica</u>	sea hare, California
ORDER Mesogastropoda	
FAMILY Ampullariidae	
<u>Pila ampullacea</u>	snail, apple
<u>Pila angelica</u>	snail, apple
<u>Pila conica</u>	snail, apple
<u>Pila luzonica</u>	snail, apple
<u>Pila polita</u>	snail, apple
<u>Pila scutata</u>	snail, apple
<u>Pomacea</u> (all species in genus)	snail, apple
FAMILY Cypraeidae	
Cypraeidae (all species in family)	cowry
FAMILY Strombidae	
<u>Lambis lambis</u>	conch
<u>Strombus luhuanus</u>	conch

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Vermetidae	
<u>Dendropoma gregaria</u>	vermetid
<u>Dendropoma meroclista</u>	vermetid
<u>Dendropoma platypus</u>	vermetid
<u>Dendropoma psarocephala</u>	vermetid
<u>Petalococonchus keenae</u>	vermetid
<u>Serpulorbis variabilis</u>	vermetid
ORDER Neogastropoda	
FAMILY Conidae	
<u>Conus marmoreus</u>	snail, marine
FAMILY Muricidae	
<u>Drupa morum</u>	snail, marine
<u>Drupa ricina</u>	snail, marine
ORDER Pulmonata	
FAMILY Vaginulidae	
<u>Vaginulus plebeius</u>	slug, land
PHYLUM Nemata (=Nematoda)	
CLASS Adenophorea	
ORDER Mermithida	
FAMILY Mermithidae	
<u>Romanomermis culicivorax</u>	nematode, mosquito
ORDER Trichocephalida	
FAMILY Trichinellidae	
<u>Trichinella spiralis</u>	nematode
FAMILY Trichuridae	
<u>Capillaria</u> (all species in genus)	nematode
CLASS Secernentea	
ORDER Ascaridida	
FAMILY Anisakidae	
<u>Anisakis</u> (all species in genus)	nematode
FAMILY Ascarididae	
<u>Ascaris lumbricoides</u>	nematode

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Diectophymatidae <u>Diectophyma renale</u>	nematode
FAMILY Toxocaridae <u>Toxocara</u> (all species in genus)	nematode
ORDER Camallanida FAMILY Dracunculidae <u>Dracunculus medinensis</u>	nematode
ORDER Rhabditida FAMILY Cephalobidae <u>Chiloplacus</u> (all species in genus) <u>Panagrellus</u> (all species in genus) <u>Turbatrix aceti</u> <u>Turbatrix silusae</u>	nematode, free living nematode, saprophytic eel, vinegar microworm
FAMILY Heterorhabditidae <u>Heterorhabditis bacteriophora</u> <u>Heterorhabditis megides</u>	nematode, entomogenous nematode, entomogenous
FAMILY Steinernematidae <u>Neoaplectana</u> (all species in genus) <u>Steinernema</u> (all species in genus except <u>S. carpocapsae</u>)	nematode, entomogenous nematode, entomogenous
ORDER Strongylida FAMILY Ancylostomatidae <u>Ancylostoma</u> (all species in genus)	nematode
FAMILY Metastrongylidae <u>Angiostrongylus costaricensis</u>	nematode, rat
FAMILY Strongyloididae <u>Strongyloides</u> (all species in genus)	nematode
FAMILY Uncinariidae <u>Necator americanus</u>	nematode
ORDER Tylenchida FAMILY Allantonematidae <u>Heterotylenchus autumnalis</u>	nematode, entomogenous

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Criconematidae <u>Meloidogyne incognita</u>	nematode, root-knot
PHYLUM Platyhelminthes CLASS Catenulida ORDER Turbellaria FAMILY Stenostomidae <u>Stenostomum</u> (all species in genus)	flatworm
CLASS Cestoda ORDER Cyclophyllidea FAMILY Dilepididae <u>Dipylidium caninum</u>	cestode
FAMILY Taeniidae <u>Taenia</u> (all species in genus) <u>Echinococcus</u> (all species in genus)	cestode cestode
ORDER Pseudophyllidea FAMILY Diphyllbothriidae <u>Diphyllbothrium latum</u>	cestode
CLASS Trematoda ORDER Echinostomida FAMILY Fasciolidae <u>Fasciola hepatica</u> <u>Fasciolopsis buski</u>	trematode trematode
FAMILY Gastrodiscidae <u>Gastrodiscoides hominis</u>	trematode
ORDER Opisthorchiida FAMILY Heterophyidae <u>Heterophyes heterophyes</u>	trematode
FAMILY Opisthorchiidae <u>Opisthorchis viverrini</u>	trematode

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
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ORDER Plagiorchiida	
FAMILY Paragonimidae	
<u>Paragonimus</u> (all species in genus)	trematode

ORDER Strigeidida	
FAMILY Schistosomatidae	
<u>Schistosoma</u> (all species in genus)	trematode

AMPHIBIANS

PHYLUM Chordata	
CLASS Amphibia	
ORDER Caudata	
FAMILY Ambystomidae	
<u>Ambystoma jeffersonianum</u>	salamander, mole
<u>Ambystoma texanum</u>	salamander, mole
FAMILY Cryptobranchidae	
<u>Andrias japonicus</u>	salamander, Japanese giant
<u>Andrias (Megalobatrachus)</u>	salamander, Chinese giant
<u>japonicus davidianus</u>	
<u>Cryptobranchus alleganiensis</u>	salamander, hellbender
FAMILY Plethodontidae	
<u>Eurycea longicauda</u>	salamander, long-tailed
FAMILY Salamandridae	
<u>Echinotriton andersoni</u>	newt, spiny
<u>Notophthalmus viridescens</u>	newt, red-spotted
ORDER Salientia	
FAMILY Bufonidae	
<u>Bufo</u> (all species in genus)	toad
FAMILY Discoglossidae	
<u>Bombina maxima</u>	toad, giant fire-bellied
<u>Bombina orientalis</u>	toad, fire-bellied
FAMILY Hylidae	
<u>Agalychnis annae</u>	treefrog, yellow-eyed
<u>Agalychnis callidryas</u>	treefrog, red-eyed
<u>Pachymedusa dacnicolor</u>	treefrog, Mexican giant

SCIENTIFIC NAMECOMMON NAMESmilisca baudini smiliscatreefrog, mottled
(Mexican)

FAMILY Leptodactylidae

Ceratophrys calcarata

frog, Columbian horned

Ceratophrys ornata

frog, ornate horned

Leptodactylus pentadactylus

bullfrog, South American

FAMILY Microhylidae

Dyscophus (all species in genus)

frog, tomato

Kaloula mediolineata

toad, Siamese-painted

Kaloula pulchra

toad, Malayan

narrow-mouthed

FAMILY Pelobatidae

Megophrys montana nasuta

frog, Siamese-horned

Megophrys monticola nasuta

frog, Asian-horned

FAMILY Pipidae

Pipa pipa

toad, Surinam

Xenopus laevis

frog, African clawed

FAMILY Ranidae

Pyxicephalus adspersusbullfrog, (African grove
crown)

FAMILY Rhacophoridae

Kassina maculata

frog, spotted running

Mantella (all species in genus)

frog, golden

Rhacophorus (Polypedates)

frog, bamboo climbing

leucomystax

(gold) (white-bearded

flying)

REPTILES

PHYLUM Chordata

CLASS Reptilia

ORDER Crocodylia

FAMILY Crocodylidae

Alligator mississippiensis

alligator, American

Caiman crocodilus

caiman, spectacled

Crocodylus (all species in genus)

crocodile

Gavialis gangeticus

gavial

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Squamata	
Two non-venomous male snakes in the suborder Serpentes for exhibition in a government zoo	snakes, non-venomous
FAMILY Agamidae	
<u>Acanthosaura armata</u>	lizard, mountain horned
<u>Agama agama</u>	lizard, common agama
<u>Agama atricollis</u>	lizard, South African agama
<u>Agama stellio</u>	hardum
<u>Calotes calotes</u>	lizard, sawback agamidae
<u>Ceratophora stoderti</u>	lizard, horned agama
<u>Ctenophor (Amphibolurus) cristatus</u>	lizard, crested dragon
<u>Ctenophor (Amphibolurus) scutulatus</u>	lizard, lozenge marked dragon
<u>Draco</u> (all species in genus)	lizard, flying dragon
<u>Gonocephalus borniensis</u>	lizard, horn-headed tree dragon
<u>Hydrosaurus</u> (all species in genus)	lizard, sailfin
<u>Leiolepis belliana</u>	lizard, smooth-scaled agama, butterfly
<u>Leiolepis rubritaeniata</u>	lizard, giant ground
<u>Moloch horridus</u>	lizard, thorny devil
<u>Physignathus cocincinus</u>	lizard, Malayan water dragon
<u>Physignathus lesueuri</u>	lizard, brown water dragon
<u>Pogona (Amphibolurus) barbatus</u>	lizard, Australian bearded dragon
<u>Pogona (Amphibolurus) nullarbor</u>	lizard, Nullarbor bearded dragon
<u>Pogona (Amphibolurus) vitticeps</u>	dragon, inland bearded
FAMILY Anguidae	
<u>Gerrhonotus (Elguria) multicaudata</u>	lizard, southern alligator
<u>Ophisaurus ventralis</u>	lizard, eastern glass
FAMILY Chamaeleonidae	
<u>Chamaeleo chamaeleon</u>	chameleon, common
<u>Furcifer oustaleti</u> (<u>Chamaeleo oustaleti</u>)	chameleon, Oustalet's

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Colubridae	
<u>Boiga irregularis</u> (four sterile male snakes for research or training of snake detector dogs)	snake, brown tree
FAMILY Cordylidae	
<u>Cordylus cataphractus</u>	lizard, armadillo
<u>Cordylus giganteus</u>	lizard, sun gazer
<u>Cordylus warreni</u>	lizard, Warrens girdled
<u>Gerrhosaurus flavigularis</u>	lizard, yellow-throated plated
<u>Gerrhosaurus major</u>	lizard, tawny plated
<u>Gerrhosaurus nigrolineatus</u>	lizard, black-lined plated
FAMILY Gekkonidae	
<u>Chondrodactylus angulifer</u>	gecko, sand
<u>Coleonyx elegans</u>	gecko, elegant banded
<u>Coleonyx variegatus</u>	gecko, western banded
<u>Cyrtodactylus pulchellus</u>	gecko, Malayan banded (naked-toe)
<u>Cyrtodactylus louisadensis</u>	gecko, naked-finger
<u>Diplodactylus spinigerus</u>	gecko, West Australian spiny-tailed (zig-zag)
<u>Eublepharis macularius</u>	gecko, leopard
<u>Gehyra mutilata</u> (Peropus)	gecko, stump-toed
<u>Gekko gekko</u>	gecko, tokay
<u>Gekko stentor</u>	gecko, giant
<u>Gymnodactylus penguensis</u> zebraic	gecko, leopard's (bent-toe)
<u>Hemidactylus frenatus</u>	gecko, house
<u>Hemidactylus garnoti</u>	gecko, Indo-Pacific
<u>Hemiphyllodactylus typus</u>	gecko, tree
<u>Hemitheconyx caudicinctus</u>	gecko, African fat-tailed
<u>Homopholus walbergi</u>	gecko, Wallberg's velvety
<u>Nephrurus</u> (all species in genus)	gecko, knob-tailed
<u>Oedura lesueuri</u>	gecko, Lesueur's velvet
<u>Oedura marmorata</u>	gecko, velvet
<u>Oedura robusta</u>	gecko, robust velvet
<u>Pachydactylus bibroni</u>	gecko, Bibron's
<u>Phelsuma abbotti</u>	gecko, Aldabra day
<u>Phelsuma cepediana</u>	gecko, blue-tailed day
<u>Phelsuma guimbeaui</u>	gecko, orange-spotted day
<u>Phelsuma laticauda</u>	gecko, gold dust day
<u>Phelsuma madagascariensis</u>	gecko, Madagascar day
<u>Phelsuma ornata</u>	gecko, Reunion Island day (ornate day)

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Phyllurus cornutus</u>	gecko, northern leaf-tailed
<u>Phyllurus platurus</u>	gecko, southern leaf-tailed
<u>Ptychozoon kuhli</u>	gecko, flying
<u>Ptychozoon lionotum</u>	gecko, flying
<u>Rhacodactylus leachianus</u>	gecko, New Caledonia giant
<u>Thecadactylus rapicauda</u>	gecko, turnip-tailed
<u>Underwoodsaurus mili</u>	gecko, turnip-tailed
<u>Uroplatus</u> (all species in genus)	gecko, flat-tailed
FAMILY Iguanidae	
<u>Anolis equestris</u>	lizard, knight anole
<u>Basiliscus basiliscus</u>	lizard, brown basilisk
<u>Basiliscus plumifrons</u>	lizard, green basilisk (double crested)
<u>Basiliscus vittatus</u>	lizard, banded basilisk
<u>Brachylophus fasciatus</u>	iguana, Tongan (Fiji banded)
<u>Callisaurus draconoides</u>	lizard, zebra-tailed
<u>Corytophanes cristatus</u>	iguana, helmeted
<u>Crotaphytus collaris</u>	lizard, collared
<u>Ctenosaura similis</u>	iguana, spiny-tailed
<u>Cyclura macleani</u>	iguana, Cuban (rhinoceros)
<u>Dipsosaurus dorsalis</u>	iguana, desert
<u>Enyaliosaurus quinquecarinatus</u>	iguana, club tail
<u>Gambelia wislizeni</u>	lizard, long-nosed leopard
<u>Holbrookia maculata</u>	lizard, lesser earless
<u>Iguana</u> (all species in genus)	iguana
<u>Phrynosoma</u> (all species in genus)	lizard, horned (horned toad)
<u>Sauromalus obesus</u>	lizard, chuckwalla
<u>Sauromalus varius</u>	lizard, chuckwalla
<u>Sceloporus clarki</u>	lizard, Clark's spiny
<u>Sceloporus jarrovi</u>	lizard, Yarrow's spiny
<u>Sceloporus magister</u>	lizard, desert spiny
<u>Sceloporus occidentalis</u>	lizard, western fence
<u>Sceloporus orcutti</u>	lizard, granite spiny
<u>Urosaurus ornatus</u>	lizard, tree
<u>Uta stansburiana</u>	lizard, side-blotched
FAMILY Lacertidae	
<u>Lacerta lepida</u>	lizard, jeweled lacerta
<u>Lacerta sicula</u>	lizard, European wall
<u>Lacerta viridis</u>	lizard, green
<u>Takydromus sexlineatus</u>	lizard, long-tailed (oriental six-lined runner)

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Pygopodidae	
<u>Delma impar</u>	lizard, smooth-scaled scaleyfoot
<u>Lialis burtonis</u>	lizard, Burton's snake
<u>Pygopus lepidopus</u>	lizard, common scaley-foot
FAMILY Scincidae	
<u>Acontias percivali</u>	lizard, East African legless
<u>Corucia zebrata</u>	skink, green tree
<u>Cryptoblepharus boutoni</u>	skink, snake-eyed
<u>Cyclodomorphus (Tiliqua) branchialis</u>	skink, West Australian short-limbed
<u>Dasia smaragdina</u>	skink, spotted green tree
<u>Egernia cunninghami</u>	skink, Cunningham's
<u>Egernia stokesii</u>	skink, gidgee
<u>Emoia cyanura</u>	skink, blue-tailed slender
<u>Eumeces obsoletus</u>	skink, Great Plains
<u>Leiopisma metallicum</u>	skink, metallic
<u>Lipinia noctua</u>	skink, moth
<u>Mabuya capensis</u>	skink, South African
<u>Mabuya capensis</u>	skink, South African blue-tailed
<u>Mabuya macularia</u>	skink, orange-throated
<u>Omolepida (Tiliqua) branchialis</u>	skink, Australian short-limbed
<u>Tiliqua nigrolutea</u>	skink, blotched- blue-tongued
<u>Tiliqua occipitalis</u>	skink, West Australian blue-tongued
<u>Tiliqua scincoides</u>	skink, blue-tongued
<u>Trachysaurus rugosus (Tiliqua rugosus)</u>	skink, shingle back
FAMILY Teiidae	
<u>Ameiva ameiva</u>	lizard, jungle runners
<u>Callopistes maculatus</u>	lizard, monitor tegu
<u>Cnemidophorus tessellatus</u>	lizard, checkered whiptail
<u>Cnemidophorus tigris</u>	lizard, western whiptail
<u>Tubinambis nigropunctatus</u>	lizard, golden tegu
<u>Tupinambis rufescens</u>	lizard, tegu red
<u>Tupinambis teguixin</u>	lizard, tegu black
FAMILY Varanidae	
<u>Varanus acanthurus</u>	monitor, spiny-tailed
<u>Varanus bengalensis</u>	monitor, Bengal
<u>Varanus dumerili</u>	monitor, Dumeril's

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Varanus exanthematicus</u>	monitor, savannah
<u>Varanus giganteus</u>	monitor, Perentee
<u>Varanus gouldi</u>	monitor, Gould's
<u>Varanus indicus</u>	monitor, Pacific
<u>Varanus komodoensis</u>	monitor, komodo
<u>Varanus niloticus</u>	monitor, Nile
<u>Varanus salvadori</u>	monitor, crocodile
<u>Varanus salvator</u>	monitor, water
<u>Varanus storri</u>	monitor, pygmy (Storr's dwarf)
<u>Varanus varius</u>	monitor, variegated
ORDER Testudines	
FAMILY Chelidae	
<u>Chelus fimbriatus</u>	turtle, mata mata
<u>Emydura albertisi</u>	turtle, New Guinea snake neck
<u>Podocnemis unifilis</u>	turtle, yellow-spotted Amazon
FAMILY Chelydridae	
<u>Chelydra serpentina</u>	turtle, snapping
<u>Macrochelys temmincki</u>	turtle, alligator snapping
FAMILY Emydidae	
<u>Heosemys grandis</u>	turtle, Asian temple
FAMILY Pelomedusidae	
<u>Pelomedusa subrufa olivacera</u>	turtle, helmeted
<u>Pelusios</u> (all species in genus)	terrapins, African hinged

FISHES

PHYLUM Chordata	
CLASS Chonodrichthyes	
ORDER Carcharhiniiformes	
FAMILY Carcharhinidae	
<u>Carcharhinus amblyrhynchos</u>	shark, gray reef
<u>Carcharhinus galapagensis</u>	shark, Galapagos
<u>Carcharhinus longimanus</u>	shark, oceanic whitetip
<u>Carcharhinus limbatus</u>	shark, blacktip

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<p>CLASS Osteichthyes ORDER Acipenseriformes FAMILY Acipenseridae</p>	
<u>Acipenser baeri</u>	sturgeon, Siberian
<u>Acipenser brevirostrum</u>	sturgeon, shortnose
<u>Acipenser fulvescens</u>	sturgeon, lake
<u>Acipenser guldenstadti</u>	sturgeon, Russian
<u>Acipenser guldenstadti</u> x <u>Huso huso</u>	sturgeon, Oceber
<u>Acipenser medirostris</u>	sturgeon, green
<u>Acipenser oxyrhynchus</u>	sturgeon, Atlantic
<u>Acipenser ruthenus</u>	sturgeon, Siberian; sterlet
<u>Acipenser ruthenus</u> x <u>Huso huso</u>	sturgeon, Bester
<u>Acipenser stellatus</u>	sturgeon, Servuga (starry)
<u>Huso huso</u>	sturgeon, Beluga
<u>Scaphirhynchus albus</u>	sturgeon, pallid
<u>Scaphirhynchus platorhynchus</u>	sturgeon, shovelnose
<p>FAMILY Polyodontidae</p>	
<u>Polyodon spathula</u>	paddlefish
<p>ORDER Atheriniformes FAMILY Atherinidae</p>	
<u>Menidia beryllina</u>	silverside
<p>ORDER Cypriniformes FAMILY Cyprinidae</p>	
<u>Notemigonus crysoleucas</u>	minnow, golden shiner
<u>Pimephales promelas</u>	minnow, fathead
<p>FAMILY Erythrinidae</p>	
<u>Hoplias malabaricus</u>	tiger fish
<p>ORDER Perciformes [FAMILY Cichlidae]</p>	
<u>[Oreochromis niloticus]</u>	[tilapia, Nile]
<p>FAMILY Mugilidae</p>	
<u>Mugil cephalus</u>	mullet, striped
<p>FAMILY Nototheniidae</p>	
<u>Dissostichus mawsoni</u>	cod, Antarctic
<u>Notothenia</u> (all species in genus)	cod, Antarctic

SCIENTIFIC NAMECOMMON NAME

FAMILY Siganidae

Lo magnificus

foxface, white

(rabbitfish)

Lo uspi

foxface, bicolor

(rabbitfish)

Lo vulpinus

lo, foxface (rabbitfish)

Siganus corallinus

rabbitfish, spotted

Siganus lineatus

goldenspot

Siganus puellus

rabbitfish, blueline

Siganus vermiculatus

rabbitfish, vermiculated

Siganus vermiculatus

rabbitfish, spinefoot

Siganus virgatus

rabbitfish, barhead

ORDER Siluriformes

FAMILY Clariidae

Clarias fuscus

catfish, Chinese

ORDER Synbranchiformes

FAMILY Synbranchidae

Monopterus albe

eel, rice paddy

BIRDS

(Taxonomy after Sibley and Monroe 1990)

PHYLUM Chordata

CLASS Aves

ORDER Anseriformes

FAMILY Anatidae

Anas platyrhynchos

duck, mallard

FAMILY Anhimidae

Chauna chavaria

screamer, black-necked

ORDER Apterygiformes

FAMILY Apterygidae

Apteryx australis

kiwi, common zoi (brown)

ORDER Caprimulgiformes

FAMILY Podargidae

Batrachostomus javensis

frogmouth, Javan

Podargus strigoides

frogmouth, tawny

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Casuariiformes	
FAMILY Casuariidae	
<u>Casuarius</u> (all species in genus)	cassowarie
FAMILY Dromaiidae	
<u>Dromaius novaehollandiae</u>	emu, common
ORDER Charadriiformes	
FAMILY Burhinidae	
<u>Burhinus bistriatus</u>	thick-knee, double-striped
<u>Burhinus capensis</u>	cape thick-knee
FAMILY Charadriidae	
<u>Pluvialis dominica</u>	plover, lesser golden
<u>Vanellus armatus</u>	plover, blacksmith
<u>Vanellus spinosus</u>	plover, African spur-wing (spur-winged lapwing)
FAMILY Glareolidae	
<u>Glareola pratincola</u>	pratincoles, collared
FAMILY Haematopidae	
<u>Haematopus ostralegus</u>	oyster catcher, European
FAMILY Jacanidae	
<u>Actophilornis africana</u>	jacana, African
FAMILY Laridae	
<u>Anous stolidus</u>	tern, brown noddy
<u>Gygis alba</u>	tern, fairy
<u>Larosterna inca</u>	tern, Inca
<u>Larus atricilla</u>	gull, laughing
<u>Larus californicus</u>	gull, California
<u>Larus heermanni</u>	gull, Heermans
<u>Procelsterna cerulea</u>	noddy, blue-grey
<u>Sterna fuscata</u>	tern, sooty
<u>Sterna sumatrana</u>	tern, black-naped
<u>Thalasseus maximus</u>	tern, royal
FAMILY Recurvirostridae	
<u>Himantopus himantopus</u>	stilt, black-winged
<u>Himantopus mexicanus</u>	stilt, black-necked
FAMILY Scolopacidae	
<u>Limnodromus griseus</u>	dowitcher, short-billed

SCIENTIFIC NAMECOMMON NAME

ORDER Ciconiiformes

FAMILY Ardeidae

<u>Ardea herodias</u>	heron, great blue
<u>Ardeola (Bubulcus) ibis</u>	egrets, cattle
<u>Egretta alba</u>	egret, great
<u>Egretta garzetta</u>	egret, little
<u>Egretta intermedia</u>	egret, plumed
<u>Egretta thula</u>	egret, snowy
<u>Hydranassa caerulea</u>	heron, little blue
<u>Hydranassa tricolor</u>	heron, tricolored
<u>Tigrisoma lineatum</u>	heron, rufescent tiger

FAMILY Ciconiidae

<u>Anastomus lamelligerus</u>	stork, open-billed
<u>Ephippiorhynchus asiaticus</u>	stork, black-neck
<u>Ephippiorhynchus senegalensis</u>	stork, saddle-bill
<u>Jabiru mycteria</u>	jabiru
<u>Leptoptilos crumeniferus</u>	stork, Marabou

FAMILY Scopidae

<u>Scopus umbetta</u>	hammerkop (hammerhead)
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FAMILY Threskiornithidae

<u>Carphibis spinicollis</u>	ibis, straw-necked
<u>Eudocimus albus</u>	ibis, American white
<u>Plegadis falcinellus</u>	ibis, glossy

ORDER Coliiformes

FAMILY Coliidae

<u>Colius striatus</u>	mousebird, speckled
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ORDER Columbiformes

FAMILY Columbidae

<u>Caloenas nicobarica</u>	pigeon, Nicobar
<u>Didunculus strigirostris</u>	pigeon, tooth-billed
<u>Ducula aenea</u>	pigeon, green imperial
<u>Ducula bicolor</u>	pigeon, pied (imperial)
<u>Ducula myristicivora</u>	pigeon, New Guinea imperial
<u>Geopelia humeralis</u>	dove, bar-shouldered
<u>Goura cristata</u>	pigeon, common crowned
<u>Leucosarcia melanoleuca</u>	pigeon, wonga
<u>Macropygia phasianella</u>	dove, slender-bill cuckoo
<u>Macropygia unchall</u>	dove, bar-tailed cuckoo
<u>Otidiphaps nobilis</u>	pigeon, pheasant (magnificent ground)

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Ptilinopus jambu</u>	pigeon, jambu fruit
<u>Ptilinopus melanospila</u>	pigeon, black naped fruit
<u>Ptilinopus perousii</u>	dove, many colored fruit
<u>Ptilinopus roseicapilla</u>	dove, Mariana fruit
<u>Ptilinopus victor</u>	dove, orange
<u>Streptopelia risoria</u>	dove, ringed turtle
<u>Streptopelia senegalensis</u>	dove, laughing
<u>Turtur chalcospilos</u>	dove, wood emerald-spotted
<u>Uropelia campestris</u>	dove, long-tailed ground
FAMILY Pteroclididae	
<u>Pterocles indicus</u>	sandgrouse, painted
<u>Syrrhaptes paradoxus</u>	sandgrouse, pallas
ORDER Coraciiformes	
FAMILY Alcedinidae	
<u>Alcedo cristata</u>	kingfisher, malchite
<u>Ceyx erithacus</u>	kingfisher, Indian forest
<u>Ceyx rufidorsus</u>	kingfisher, red-backed
<u>Dacelo gigas</u>	kookabura, laughing
<u>Halcyon chloris</u>	kingfisher, white-collared
<u>Halcyon cinnamomina</u>	kingfisher, Micronesian
<u>Halcyon leucocephala</u>	kingfisher, grey-headed
<u>Halcyon pileata</u>	kingfisher, black-capped
<u>Halcyon recurvirostris</u>	kingfisher, flat-billed
<u>Tanysiptera galatea</u>	kingfisher, common paradise
FAMILY Bucerotidae	
<u>Aceros leucocephalus</u>	hornbill, wrinkled
<u>Aceros nipalensis</u>	hornbill, rufous-necked
<u>Aceros plicatus</u>	hornbill, Papuan (Blyths)
<u>Aceros undulatus</u>	hornbill, wreathed
<u>Anthracoceros coronatus</u>	hornbill, pied
<u>Anthracoceros malabaricus</u>	hornbill, northern pied
<u>Buceros bicornis</u>	hornbill, great
<u>Buceros hydrocorax</u>	hornbill, rufous
<u>Buceros rhinoceros silvestris</u>	hornbill, rhinoceros
<u>Bucorvus abyssinicus</u>	hornbill, Abyssinian ground
<u>Bucorvus leadbeateri</u>	hornbill, African ground
<u>Penelopides exarhatus</u>	hornbill, Celebean
<u>Tockus erythrorhynchus</u>	hornbill, red-billed
FAMILY Coraciidae	
<u>Coracias benghalensis</u>	roller, Indian
<u>Coracias caudata</u>	roller, lilac-breasted

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Meropidae	
<u>Merops nubicus</u>	bee-eater, carmine
<u>Merops philippinus</u>	bee-eater, brown-breasted
FAMILY Momotidae	
<u>Momotus momota</u>	motmot, blue-crowned
FAMILY Phoeniculidae	
<u>Phoenicilus purpureus</u>	hoopoe, green wood
FAMILY Upupidae	
<u>Upupa epops</u>	hoopoe, common
ORDER Cuculiformes	
FAMILY Cuculidae	
<u>Carpococcyx renauldi</u>	cuckoo, red-billed ground
<u>Centropus sinensis</u>	coucal, greater
<u>Rhopodytes tristis</u>	malkoha, greater green-billed
FAMILY Musophagidae	
<u>Corythaixoides leucogaster</u>	go-away bird, white-bellied
<u>Tauraco erythrolophus</u>	turaco, red-crested
<u>Tauraco leucolophus</u>	turaco, white-crested
<u>Tauraco livingstonii</u>	turaco, Livingstone's
ORDER Falconiformes	
FAMILY Accipitridae	
<u>Aegypius monachus</u>	vulture, cinereous
<u>Aquila</u> (all species in genus)	eagle
<u>Buteo jamaicensis</u>	hawk, red-tailed
<u>Buteo solitarius</u>	hawk, Hawaiian
<u>Gyps africanus</u>	vulture, white-backed
<u>Gyps bengalensis</u>	vulture, white-backed
<u>Haliaeetus</u> (all species in genus)	eagle
<u>Haliastur indus</u>	kite, Brahminy
<u>Harpia harpyja</u>	eagle, harpy
<u>Harpyopsis novaegineae</u>	eagle, New Guinea harpy
<u>Heterospizias meridionalis</u>	hawk, savana
<u>Necrosyrtes monachus</u>	vulture, hooded
<u>Neophron percnopterus</u>	vulture, Egyptian
<u>Parabuteo unicinctus harrisi</u>	hawk, Harris's (bay-winged)
<u>Pithecophaga jefferyi</u>	eagle, monkey-eating
<u>Trigonoceps occipitalis</u>	vulture, white-headed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Cathartidae	
<u>Cathartes aura</u>	vulture, turkey
<u>Coragyps atratus</u>	vulture, black
<u>Sarcorhamphus papa</u>	vulture, king
FAMILY Falconidae	
<u>Falco</u> (all species in genus)	falcon
<u>Herpetotheres</u> (all species in genus)	falcon
<u>Polihierax semitorquatus</u>	falcon, African pigmy
<u>Polyborus</u> (all species in genus)	caracara
FAMILY Sagittariidae	
<u>Sagittarius serpentarius</u>	secretary bird
ORDER Galliformes	
FAMILY Cracidae	
<u>Crax mitu</u>	curassow, razor-billed
<u>Penelope pileata</u>	guan, white crested
<u>Penelope purpurascens</u>	guan, crested
FAMILY Megapodiidae	
<u>Aepyodius arfakianus</u>	turkey, wattled brush
<u>Alectura lathami</u>	turkey, brush
<u>Megapodius freycinet</u>	scrubfowl, common
<u>Megapodius laperouse</u>	fowl, Micronesia scrub
<u>Megapodius pritchardii</u>	megapode, Niuafo'ou
FAMILY Phasianidae	
<u>Caloperdix oclea</u>	partridge, ferruginous wood
<u>Guttera edouardi</u>	fowl, crested Guinea
<u>Meleagris ocellata</u>	turkey, ocellated
ORDER Gruiformes	
FAMILY Eurypygidae	
<u>Eurypyga helias</u>	bittern, sun
FAMILY Gruidae	
<u>Grus japonensis</u>	crane, Manchurian
<u>Grus vipio</u>	crane, white-naped
FAMILY Psophiidae	
<u>Psophia crepitans</u>	trumpeter, common
<u>Psophia leucoptera</u>	trumpeter, white-winged
<u>Psophia viridis</u>	trumpeter, green-winged

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Rallidae	
<u>Aramides cajanea</u>	rail, grey-necked wood
<u>Limnocorax flavirostra</u>	crake, black
<u>Porphyrio poliocephalus</u>	moorhen
<u>Porphyrio pulverulentus</u>	pukeko
<u>Rallus owstoni</u>	rail, Guam
<u>Rallus philippensis</u>	rail, banded
ORDER Passeriformes	
FAMILY Alaudidae	
<u>Alauda arvensis</u>	skylark
<u>Eremopterix keycioareua</u>	lark, Fishers sparrow
FAMILY Artamidae	
<u>Artamus leucorhynchus</u>	swallow, white-breasted wood
FAMILY Bombycillidae	
<u>Ptilogonys cinereus</u>	flycatcher, gray silky
FAMILY Campephagidae	
<u>Coracina pectoralis</u>	shrike, white-breasted cuckoo
<u>Coracina tenuirostris</u>	bird, cicada
<u>Prionops plumata</u>	shrike, straight-crested helmet
FAMILY Corvidae	
<u>Cissa chinensis</u>	magpie, green
<u>Corvus albus</u>	crow, pied
<u>Corvus corax</u>	raven
<u>Corvus kubaryi</u>	crow, Mariana
<u>Cyanocitta cristata</u>	jay, blue
<u>Cyanocitta stelleri</u>	jay, Stellers
<u>Cyanocorax chrysops</u>	jay, pileated (plush crested)
<u>Platylophus galericulatus</u>	jay, crested
<u>Urocissa erythrorhyncha</u>	magpie, blue (red billed)
FAMILY Cotingidae	
<u>Cephalopterus penduliger</u>	umbrella bird, long-wattled
<u>Rupicola peruviana</u>	cock-of-the-rock, Andean
<u>Procnis nudicollis</u>	bellbird, naked throated

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Dicruridae	
<u>Dicrurus remifer</u>	drongo, lesser racket-tailed
FAMILY Emberizidae	
<u>Paroaria gularis pheucticus</u>	cardinal, black-throated (red-capped)
<u>Passerina cyanoides</u>	grosbeak, blue-back
<u>Pheucticus ludovicianus</u>	grosbeak, rose-breasted
<u>Pheucticus melanocephalus</u>	grosbeak, black-headed
FAMILY Estrildidae	
<u>Estrilda rhodopyga</u>	waxbill, crimson-rumped
<u>Lonchura maja</u>	nun, white-headed; white-headed munia
<u>Ortygospiza atricollis</u>	finch, quail
FAMILY Eurylaimidae	
<u>Calyptomena viridis</u>	broadbill, green
FAMILY Icteridae	
<u>Icterus chrysocephalus</u>	oriole, moriche
<u>Icterus icterus</u>	troupial
<u>Psarocolius decumanus</u>	oropendola, crested
FAMILY Irenidae	
<u>Chloropsis aurifrons</u>	leafbird, golden-fronted
FAMILY Mimidae	
<u>Dumetella carolinensis</u>	catbird, common
<u>Mimus gilvus</u>	mockingbird, tropical
FAMILY Motacillidae	
<u>Motacilla flava</u>	wagtail, yellow
FAMILY Muscicapidae	
<u>Acrocephalus luscini</u>	warbler, nightingale reed
<u>Acrocephalus syrinx</u>	warbler, Caroline Islands reed
<u>Cettia subulata</u>	warbler, bush
<u>Cyornis tickelliae</u>	flycatcher, Tickell's blue
<u>Erithacus calliope</u>	rubythroat, Siberian
<u>Erithacus komadori</u>	robin, Temminck's
<u>Erithacus obscurus</u>	robin, black-throated
<u>Eumyias thalassina</u>	flycatcher, verditer
<u>Ficedula narcissina</u>	flycatcher, narcissus
<u>Garrulax leucolophus</u>	thrush, white-crested laughing

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Garrulax milnei</u>	thrush, red-tailed laughing
<u>Garrulax monileger</u>	thrush, lesser necklaced laughing
<u>Metabolus regensis</u>	monarch, Truk
<u>Monarcha godeffroyi</u>	monarch, Yap
<u>Monarcha takatsuakasae</u>	monarch, Tinian
<u>Myadestes obscurus</u>	solitaire, brown-backed
<u>Myadestes townsendi</u>	solitaire, Townsend's
<u>Myiagra azureocapilla</u>	flycatcher, blue-crested
<u>Myiagra erythroptis</u>	broadbill, Palau
<u>Myiophoneus caeruleus</u>	thrush, blue whistling
<u>Niltava sundara</u>	niltava, rufous-bellied
<u>Pachycephala pectoralis</u>	whistler, golden
<u>Phoenicurus aureus</u>	redstart, Daurian
<u>Rhipidura lepida</u>	fantail, Palau
<u>Rhipidura rufifrons</u>	fantail, rufous
<u>Turdus migratorius</u>	robin, American
FAMILY Oriolidae	
<u>Oriolus chinensis</u>	oriole, black-naped
FAMILY Paradisaeidae	
<u>Astrapia mayeri</u>	astrapia, ribbon-tailed
<u>Astrapia stephaniae</u>	bird-of-paradise, Princess Stephanie's
<u>Cicinnurus regius</u>	bird-of-paradise, king
<u>Diphyllodes magnificus</u>	bird-of-paradise, magnificent
<u>Diphyllodes respublica</u>	bird-of-paradise, Wilson's
<u>Lophorina superba</u>	bird-of-paradise, superb
<u>Paradisaea apoda</u>	bird-of-paradise, greater
<u>Paradisaea guilielmi</u>	bird-of-paradise, white plumed
<u>Paradisaea minor</u>	bird-of-paradise, lesser
<u>Paradisaea rubra</u>	bird-of-paradise, red
<u>Paradisaea rudolphi</u>	bird-of-paradise, blue
<u>Paradisaea raggiana</u>	bird-of-paradise, Count Raggi's
<u>Parotia carolae</u>	bird-of-paradise, Queen Carol's
<u>Parotia lawesii</u>	parotia, Lawe's
<u>Ptiloris magnificus</u>	rifle bird, magnificent
<u>Seleucidis melanoleuca</u>	bird-of-paradise, twelve-wired
FAMILY Pipridae	
<u>Chiroxiphia caudata</u>	manakin, swallow-tailed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Pittidae	
<u>Pitta moluccensis</u>	pitta, blue-winged
<u>Pitta sordida</u>	pitta, hooded
<u>Pitta steerii</u>	pitta, steers
FAMILY Ploceidae	
<u>Bubalornis albirostris</u>	weaver, buffalo
<u>Dinemellia dinemelli</u>	weaver, white-headed buffalo
<u>Plocepasser mahali</u>	weaver, white-browed sparrow
FAMILY Ptilonorhynchidae	
<u>Amblyornis macgregoriae</u>	bowerbird, Macgregor's
<u>Chlamydera cerviniventris</u>	bowerbird, fawn-breasted
<u>Ptilonorhynchus violaceus</u>	bowerbird, satin
FAMILY Sturnidae	
<u>Buphagus africanus</u>	oxpecker, yellow-billed
<u>Cinnyricinclus leucogaster</u>	starling, violet-backed
<u>Cosmopsarus regius</u>	starling, golden-breasted
<u>Lamprotornis purpureus</u>	starling, purple glossy
<u>Lamprotornis purpuropterus</u>	starling, Ruppell's long-tailed
<u>Leucopsar rothschildi</u>	mynah, Bali
<u>Spreo superbus</u>	starling, superb
<u>Sturnus nigricollis</u>	starling, black collared
FAMILY Thraupidae	
<u>Piranga olivacea</u> (males only)	tanager, scarlet
<u>Ramphocelus dimidiatus</u> (males only)	tanager, crimson-backed
<u>Thraupis episcopus</u> (males only)	tanager, blue-grey
FAMILY Tinamidae	
<u>Eudromia formosa</u>	tinamou, crested
FAMILY Zosteropidae	
<u>Zosterops palpebrosa</u>	white-eye, oriental
ORDER Pelecaniformes	
FAMILY Pelecanidae	
<u>Pelecanus</u> (all species in genus)	pelican
FAMILY Phalacrocoracidae	
<u>Phalacrocorax carbo</u>	cormorant, common

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Piciformes	
FAMILY Capitonidae	
<u>Lybius</u> (all species in genus)	barbets
<u>Megalaima armillaris</u>	barbett, Armott's (blue crowned)
<u>Megalaima asiatica</u>	barbet, blue-throated
<u>Semnornis ramphastinus</u>	barbet, toucan
<u>Trachyphonus erythrocephalus</u>	barbet, red and yellow
FAMILY Indicatoridae	
<u>Indicator indicator</u>	honeyguide, black-throated
FAMILY Picidae	
<u>Chrysocolaptes lucidus</u>	woodpecker, greater goldenbacked
<u>Picoides canicapillus</u>	woodpecker, gray-capped
FAMILY Rhamphastidae	
<u>Pteroglossus beauharnaesii</u>	aracari, curl-crested
<u>Ramphastos ambiguus swainsonii</u>	toucan, bicolored-billed
<u>Ramphastos discolorus</u>	toucan, red-breasted
<u>Ramphastos sulfuratus sulfuratus</u>	toucan, sulfur breasted, north kneel-bill
<u>Ramphastos toco cuvieri</u>	toucan, Cuvier's
<u>Ramphastos toco toco</u>	toucan, north toco
<u>Ramphastos vitellinus ariel</u>	toucan, ariel channel-bill
<u>Ramphastos vitellinus vitellinus</u>	toucan, sulphur and white, north channel-bill
<u>Selenidera maculirostris</u>	toucanet, spot-billed
ORDER Procellariiformes	
FAMILY Procellariidae	
<u>Puffinus pacificus</u>	shearwater, wedge-tailed
ORDER Psittaciformes	
FAMILY Loriidae	
<u>Chalcopsitta sintillata</u>	lory, yellow streaked
<u>Chamosyna papou goliathina</u>	lory, central Stella's
<u>Trichoglossus haematodus</u>	lory, rainbow
<u>Trichoglossus johnstoniae</u>	lorikeet, Johnstone's
<u>Trichoglossus rubiginosus</u>	lory, Ponape
<u>Vini peruviana</u>	lory, Tahitian
FAMILY Psittacidae	
<u>Brotogeris jugularis</u>	parakeet, orange-chinned
<u>Eunymphicus cornutus</u>	parakeet, horned

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Lathamus discolor</u>	parrot, swift
<u>Loriculus galgulus</u>	lory, blue-crowned
<u>Loriculus philippensis</u>	parrot, Philippine hanging
<u>Nandayus nenday</u>	conure, nanday
<u>Nestor notabilis</u>	kea
<u>Prosopoeia tabuensis</u>	parrot, red shining
<u>Psittaculirostris</u> (all species in genus)	parrot, fig
<u>Psittrichas fulgidus</u>	parrot, Pesquets
ORDER Rheiformes	
FAMILY Rheidae	
<u>Rhea americana</u>	rhea, common (greater)
ORDER Strigiformes	
FAMILY Strigidae	
<u>Asio flammeus</u>	owl, short-eared
<u>Bubo virginianus</u>	owl, great horned
<u>Glaucidium brodiei</u>	owlet, pygmy
<u>Scotopelia peli</u>	owl, Pell's fishing
<u>Speotyto cunicularia</u>	owl, burrowing
<u>Strix varia</u>	owl, barred
FAMILY Tytonidae	
<u>Tyto alba</u>	owl, common barn
ORDER Trogoniformes	
FAMILY Trogonidae	
<u>Pharomachrus auriceps</u>	quetzal, golden-headed
<u>Pharomachrus mocinno</u>	quetzal, resplendent
<u>Harpactes erythrocephalus</u>	trogon, red-headed
<u>Trogon viridis</u>	trogon, white-tailed
ORDER Apodiformes	
FAMILY Trochilidae	
Trochilidae (sexually dimorphic males only)	hummingbirds
ORDER Psittaciformes	
FAMILY Loriidae	
<u>Eos bornea</u> (males only)	lory, red
<u>Eos squamata</u> (males only)	lory, violet-necked
<u>Lorius lory</u> (males only)	lory, black-capped

SCIENTIFIC NAMECOMMON NAME

MAMMALS

PHYLUM Chordata

CLASS Mammalia

ORDER Artiodactyla

FAMILY Bovidae

Bovidae (all species in family)

wild cattle, buffalo,
antelopes, etc.

FAMILY Camelidae

Camelus bactrianus

camel, Bactrian

Camelus dromedarius

camel

FAMILY Cervidae

Cervus nippon

deer, sika

Dama dama (=Cervus dama)deer, white European
fallowMuntiacus muntjak

deer, Indian muntjac

Muntiacus reevesi

muntjac, Reeve's

Odocoileus hemionus

deer, black-tailed

FAMILY Girrafidae

Okapia johnstoni

okapi

FAMILY Hippopotamidae

Choeropsis liberiensis

hippo, pygmy

Hippopotamus amphibius

hippopotamus

FAMILY Suidae

Babyrousa babyrousa

barbirusa

Phacochoerus aethiopicus

hog, wart

Sus barbatus

pig, bearded

FAMILY Tayassuidae

Tayassu tajacu

peccary, collared

ORDER Carnivora

FAMILY Canidae

Lycaon pictus

dog, African hunting

Otocyon megalotis

fox, bat-eared

Vulpes (all species in genus)

fox

FAMILY Felidae

Acinonyx jubatus

cheetah

Felis caracal (=Lynx caracal)

caracal

Felis pardalis

ocelot

Felis serval

serval

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Felis wiedii</u>	margay
<u>Panthera leo</u>	lion
<u>Panthera nebulosa</u> (=Neofelis nebulosa)	clouded leopard
<u>Panthera onca</u>	jaguar
<u>Panthera pardus</u>	leopard
<u>Panthera tigris</u>	tiger
<u>Profelis concolor</u> (=Felis concolor)	puma, (cougar), (mountain lion)
FAMILY Hyaenidae	
<u>Crocuta crocuta</u>	hyena, spotted
<u>Proteles cristatus</u>	aardwolf
FAMILY Mustelidae	
<u>Aonyx cinerea</u>	otter, Asian small-clawed
<u>Lutra canadensis</u>	otter, land river
<u>Mephitis</u> (all species in genus)	skunk
<u>Mustela lutreola</u>	mink
<u>Mustela putorius furo</u>	ferret
<u>Mustela vison</u>	mink
<u>Pteronura brasiliensis</u>	otter, giant
FAMILY Procyonidae	
<u>Ailurus fulgens</u>	panda, red
<u>Nasua</u> (all species in genus)	coati
<u>Potos flavus</u>	kinkajou
<u>Procyon lotor</u>	raccoon
FAMILY Ursidae	
<u>Helarctos malayanus</u>	sunbear, Malayan
<u>Melursus ursinus</u>	bear, sloth
<u>Selenarcos thibetanus</u> (=Ursus thibetanus)	bear, Asiatic black
<u>Tremarctos ornatus</u>	bear, spectacled
<u>Ursus</u> (all species in genus)	bear
FAMILY Viverridae	
<u>Arctictis binturong</u>	binturong
<u>Suricata suricatta</u>	meerkat, slender-tailed
<u>Herpestes auro punctatus</u>	mongoose, small Indian
ORDER Diprotodontia (=Marsupialia)	
FAMILY Didelphidae	
<u>Didelphis marsupialis</u>	opossum

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Macropodidae	
<u>Aepyrymnus</u> (all species in genus)	rat-kangaroo, Rufous
<u>Bettongia</u> (all species in genus)	rat-kangaroo
<u>Caloprymnus</u> (all species in genus)	rat-kangaroo, desert
<u>Dendrolagus</u> (all species in genus)	tree-kangaroo
<u>Dorcopsis</u> (all species in genus)	wallaby, New Guinea forest
<u>Dorcopsulus</u> (all species in genus)	wallaby, New Guinea mountain
<u>Hypsiprymnodon</u> (all species in genus)	rat-kangaroo, musk
<u>Lagorchestes</u> (all species in genus)	wallaby, hare
<u>Lagostrophus</u> (all species in genus)	wallaby, banded hare
<u>Macropus</u> (all species in genus)	wallaby (kangaroo)
<u>Megaleia</u> (all species in genus)	kangaroo, red
<u>Onychogalea</u> (all species in genus)	wallaby, nail-tailed
<u>Peradorcas</u> (all species in genus)	rock-wallaby, little
<u>Petrogale</u> (all species in genus)	rock-wallaby
<u>Potorous</u> (all species in genus)	potoroo
<u>Setonix</u> (all species in genus)	quokka
<u>Thylogale</u> (all species in genus)	pademelon
<u>Wallabia</u> (all species in genus)	wallaby, swamp
FAMILY Phascolarctidae	
<u>Phascolarctos cinereus</u>	bear, koala
ORDER Edentata	
FAMILY Bradipodidae	
<u>Bradypus</u> (all species in genus)	sloth, three toed
<u>Choloepus</u> (all species in genus)	sloth, two toed
FAMILY Dasypodidae	
<u>Dasypus</u> (all species in genus)	armadillo
FAMILY Myrmecophagidae	
<u>Myrmecophaga tridactyla</u>	anteater, giant
ORDER Hyracoidea	
FAMILY Procaviidae	
<u>Procavia capensis</u>	hyrax, rock
ORDER Insectivora	
FAMILY Erinaceidae	
<u>Hemiechinus auritis</u>	hedge hog, long-eared
FAMILY Soricidae	
<u>Crocidura</u> (all species in genus)	shrew, musk

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Perissodactyla	
FAMILY Equidae	
<u>Equus africanus</u> (=Equus asinus)	ass, African wild
FAMILY Rhinocerotidae	
<u>Ceratotherium simum</u>	rhinoceros, southern white
<u>Diceros bicornis</u>	rhinoceros, black
<u>Rhinoceros unicornis</u>	rhinoceros, great Indian
FAMILY Tapiridae	
<u>Tapirus indicus</u>	tapir, Malayan
<u>Tapirus terrestris</u>	tapir
ORDER Proboscidea	
FAMILY Elephantidae	
<u>Elaphas maximus</u>	elephant, Asian
<u>Loxodonta africana</u>	elephant, African
ORDER Rodentia	
FAMILY Caviidae	
<u>Dolichotis patagonum</u>	cavy, Patagonian
FAMILY Cricetidae	
<u>Cricetulus griseus</u>	mouse, Chinese
<u>Gerbillus gerbillus</u>	gerbil
<u>Meriones unguiculatus</u>	gerbil
<u>Mesocricetus auratus</u>	hamster
<u>Sigmondon hispidus</u>	rat, cotton
FAMILY Dasyproctidae	
<u>Agouti paca</u>	agouti
<u>Dasyprocta agouti</u> (=D. leporina)	agouti
FAMILY Erethizontidae	
<u>Erethizon dorsatum</u>	porcupine, North American
FAMILY Heteromyidae	
<u>Perognathus longimembris</u>	mice, pocket
FAMILY Hystricidae	
<u>Hystrix cristata</u>	porcupine, African crested
FAMILY Myocastoridae	
<u>Myocastor coypu</u>	nutria

SCIENTIFIC NAMECOMMON NAME

FAMILY Sciuridae	
<u>Callosciurus prevosti</u>	squirrel, prevost's
<u>Marmota</u> (all species in genus)	marmots
<u>Sciurus variegatoide</u>	squirrel, variegated
ORDER Scandentia	
FAMILY Tupaiidae	
<u>Tupaia glis</u>	shrew, tree
ORDER Tubulidentata	
FAMILY Orycteropodidae	
<u>Orycteropus afer</u>	aardvark

PART B: FOR PRIVATE AND COMMERCIAL USE

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
INVERTEBRATES	
PHYLUM Annelida CLASS Oligochaeta ORDER Haplotaxida FAMILY Lumbricidae <u>Lumbricus rubellus</u>	earthworm, red
PHYLUM Arthropoda CLASS Crustacea ORDER Amphipoda FAMILY Gammaridae <u>Gammarus</u> (all species in genus)	crustacean, freshwater; scud
FAMILY Hyalellidae <u>Hyalella azteca</u>	shrimps, imps (amphipod)
ORDER Cladocera FAMILY Sididae <u>Diaphanosoma</u> (all species in genus)	flea, water
ORDER Cyclopoida FAMILY Cyclopidae <u>Cyclops</u> (all species in genus)	copepod, freshwater
ORDER Decapoda FAMILY Alpheidae <u>Alpheus brevicristatus</u>	shrimp, Japan (pistol)
FAMILY Palinuridae <u>Panulirus gracilis</u> <u>Panulirus</u> (all species in genus except <u>Panulirus argus</u> , <u>P. longipes femoristriga</u> , <u>P. pencillatus</u>)	lobster, green spiny lobster, spiny
FAMILY Pandalidae <u>Pandalus platyceros</u>	shrimp, giant (prawn)
FAMILY Penaeidae <u>Penaeus indicus</u> <u>Penaeus californiensis</u>	shrimp, penaeid shrimp, penaeid

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Penaeus japonicus</u>	shrimp, wheel (ginger)
<u>Penaeus monodon</u>	shrimp, jumbo tiger
<u>Penaeus orientalis</u> (<u>chinensis</u>)	shrimp, penaeid
<u>Penaeus plebjius</u>	shrimp, penaeid
<u>Penaeus schmitti</u>	shrimp, penaeid
<u>Penaeus semisulcatus</u>	shrimp, penaeid
<u>Penaeus setiferus</u>	shrimp, white
<u>Penaeus stylirostris</u>	shrimp, penaeid
<u>Penaeus vannamei</u>	shrimp, penaeid
ORDER Isopoda	
FAMILY Asellidae	
<u>Asellus</u> (all species in genus)	crustacean, freshwater
ORDER Podocopina	
FAMILY Cyprididae	
<u>Cypris</u> (all species in genus)	ostracod, freshwater
CLASS Insecta	
ORDER Diptera	
FAMILY Calliphoridae	
<u>Lucilia sericata</u>	blow fly, green bottle
ORDER Hymenoptera	
FAMILY Braconidae	
<u>Cotesia plutellae</u>	parasite, diamondback moth
ORDER Lepidoptera	
FAMILY Nymphalidae	
<u>Dryadula phaetusa</u>	butterfly
<u>Eueides isabella</u>	butterfly
<u>Heliconius charitonius</u>	butterfly
<u>Heliconius erato</u>	butterfly
<u>Heliconius hecale</u>	butterfly
<u>Heliconius melpomene</u>	butterfly
<u>Heliconius sara</u>	butterfly
<u>Morpho menelaus</u>	butterfly
<u>Morpho peleides</u>	butterfly
FAMILY Papilionidae	
<u>Ornithoptera priamus</u>	butterfly
<u>Pachliopta aristolochiae</u>	butterfly
<u>Pachliopta kotzebuea</u>	butterfly
<u>Papilio thoas</u>	butterfly
<u>Papilio ulysses</u>	butterfly

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Parides iphidamas</u>	butterfly
<u>Parides photinus</u>	butterfly
<u>Trogonoptera brookiana</u>	butterfly
<u>Troides helena</u>	butterfly
<u>Troides rhadamanthus</u>	butterfly
<u>ORDER Orthoptera</u>	
<u>FAMILY Gryllidae</u>	
<u>Acheta domesticus</u>	<u>cricket, house</u>
PHYLUM Cnidaria	
CLASS Anthozoa	
ORDER Alcyonacea	
FAMILY Alcyoniidae	
<u>Sarcophyton ehrenbergi</u>	coral, leather
<u>Sarcophyton glaucum</u>	coral, leather
<u>Sarcophyton trocheliophorum</u>	coral, leather
<u>ORDER Scleractinia</u>	
<u>FAMILY Acroporidae</u>	
<u>Acropora aspersa</u>	coral, stony
<u>Acropora austera</u>	coral, stony
<u>Acropora elseyi</u>	coral, stony
<u>Acropora formosa</u>	coral, stony
<u>Acropora microphthalma</u>	coral, stony
<u>Acropora nana</u>	coral, stony
PHYLUM Mollusca	
CLASS Bivalvia	
ORDER Pelecypoda	
FAMILY Margaritiferidae	
<u>Margaritifera margaritifera</u>	mussel, freshwater
<u>ORDER Pterioida</u>	
<u>FAMILY Pteridae</u>	
<u>Pinctada fucata</u>	oyster, akoya
<u>Pinctada margaritifera</u>	oyster, black lipped pearl
<u>Pinctada maxima</u>	oyster, silver lipped pearl
<u>ORDER Unionoida</u>	
<u>FAMILY Unionidae</u>	
<u>Anodonta</u> (all species in genus)	mussel, freshwater
<u>Proptera alata</u>	mussel, freshwater
<u>Unio</u> (all species in genus)	mussel, freshwater

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Veneroida	
FAMILY Tridacnidae	
<u>Hippopus hippopus</u>	clam, giant
<u>Tridacna crocea</u>	clam, giant
<u>Tridacna derasa</u>	clam, giant
<u>Tridacna gigas</u>	clam, giant
<u>Tridacna hippopus</u>	clam, giant
<u>Tridacna maxima</u>	clam, giant
<u>Tridacna squamosa</u>	clam, giant
FAMILY Veneridae	
<u>Anodontia stearnsiana</u>	clam, mangrove
<u>Mercenaria mercenaria</u> x <u>M. campechiensis</u>	clam, hybrid
CLASS Gastropoda	
ORDER Archaeogastropoda	
FAMILY Trochidae	
<u>Trochus niloticus</u>	topshell
PHYLUM Nemata (=Nematoda)	
CLASS Adenophorea	
ORDER Trichocephalida	
FAMILY Trichuridae	
<u>Trichuris trichiura</u>	nematode
CLASS Secernentea	
ORDER Ascaridida	
FAMILY Oxvuridae	
<u>Enterobius vermicularis</u>	nematode
ORDER Strongylida	
FAMILY Trichostrongylidae	
<u>Trichostrongylus</u> (all species in genus)	nematode
ORDER Tylenchida	
FAMILY Heteroderidae	
<u>Rotylenchus</u> (all species in genus)	nematode

SCIENTIFIC NAMECOMMON NAME

AMPHIBIANS

PHYLUM Chordata

CLASS Amphibia

ORDER Caudata

FAMILY Salamandridae

Triturus boscai

newt

Triturus italicus

newt, Italian

Tylostrotion verrocous

newt, emperor

ORDER Salientia

FAMILY Dendrobatidae

Dendrobates (all species in genus)frog, poison arrow
(poison dart)

FAMILY Hylidae

Hyla vasta

treefrog, Haitian giant

FAMILY Ranidae

Rana erythraea

frog, red-eared

Rana jerboa

frog

Rana limnocharis

frog, rice

Rana pustulosa

frog

REPTILES

PHYLUM Chordata

CLASS Reptilia

ORDER Squamata

FAMILY Chamaeleonidae

Chamaeleo jacksoni

chameleon, Jackson's

FAMILY Iguanidae

Amblyrhynchus cristatus

iguana, Galapagos-marine

Anolis carolinensis

chameleon, American

Conolophus subcristatus

iguana, Galapagos-land

FAMILY Scincidae

Emoia physicae

skink, ground

Lobulia elegans

skink, ground

Lobulia morokana

skink, ground

Lobulia stanleyana

skink, ground

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Testudines	
FAMILY Chelidae	
<u>Chelodina longicollis</u>	turtle, Australian side-neck
FAMILY Cheloniidae	
<u>Chelonia mydas agassizii</u>	turtle, green sea
<u>Lepidochelys olivacea</u>	turtle, loggerhead (Ridley)
FAMILY Emydidae	
<u>Batagur baska</u>	turtle, Batagur
<u>Callagur borneoensis</u>	turtle, giant river
<u>Chinemys kwangtungensis</u>	turtle, Kwangtung pond
<u>Chinemys reevesi</u>	turtle, Reeves
<u>Chrysemys (Pseudemys)</u> <u>alabamensis</u>	turtle, Alabama red-bellied
<u>Chrysemys (Pseudemys)</u> <u>rubriventris</u>	turtle, Plymouth red-bellied
<u>Cuora amboinensis</u>	turtle, Malayan box
<u>Cuora flavomarginata</u>	turtle, yellow-margined box
<u>Cuora galbinifrons</u>	turtle, white-fronted box
<u>Cuora trifasciata</u>	turtle, three-keeled box
<u>Cyclemys dentata</u>	turtle, Asian leaf
<u>Geoclemys hamiltoni</u>	turtle, black pond
<u>Geoemyda spengleri</u>	turtle, black-bellied notched
<u>Graptemys oculifera</u>	turtle, ringed map
<u>Hardella thurji</u>	turtle, Brahminy river
<u>Heosemys (all species in genus</u> <u>except H. grandis)</u>	turtle, cogwheel
<u>Hieremys annandalei</u>	turtle, temple
<u>Kachuga (all species in genus)</u>	turtle, roof
<u>Malaclemys terrapin</u>	turtle, diamond back terrapin
<u>Mauremys (Annamemys)</u> <u>annamensis</u>	turtle, Eurasian pond
<u>Melanochelys tricarinata</u>	turtle, three-keeled Indian terrapin
<u>Melanochelys trijuga</u>	turtle, black-bellied terrapin
<u>Morenia ocellata</u>	turtle, ocellated peacock
<u>Morenia petersi</u>	turtle, Peter's peacock
<u>Notochelys platynota</u>	turtle, flat-back
<u>Ocadia sinensis</u>	turtle, Chinese striped
<u>Orlitia borneensis</u>	turtle, Bornean river
<u>Pyxidea mouhoti</u>	turtle, Indian thorn
<u>Rhinoclemmys (Callopsis)</u> <u>(all species in genus)</u>	turtle, painted forest
<u>Sacalia bealei</u>	turtle, six-eyed pond
<u>Siebenrockiella crassicollis</u>	turtle, fat-headed
<u>Terrapene coahuila</u>	turtle, aquatic box
<u>Trachemys (all species in genus)</u>	turtle, slider

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Kinosternidae	
<u>Kinosternon</u> (all species in genus)	turtle, mud
<u>Staurotypus salvini</u>	turtle, giant musk
<u>Staurotypus triporcatus</u>	turtle, giant musk
<u>Sternotherus carinatus</u>	turtle, keel-backed musk
<u>Sternotherus minor depressus</u>	turtle, flattened musk
<u>Sternotherus minor minor</u>	turtle, loggerhead musk
<u>Sternotherus minor peltifer</u>	turtle, musk
<u>Sternotherus odoratus</u>	turtle, stinkpot (common musk)
FAMILY Testudinidae	
<u>Asterochelys radiata</u>	tortoise, radiated
<u>Asterochelys yniphora</u>	tortoise, angulated
<u>Chelonoidis elephantopus</u>	tortoise, Galapagos
<u>Gopherus (Xerobates) agassizi</u>	tortoise, desert
<u>Gopherus flavomarginatus</u>	tortoise, Bolson
<u>Gopherus polyphemus</u>	tortoise, gopher
<u>Indotestudo</u> (all species in genus)	tortoise
<u>Kinixys belliana</u>	tortoise, Bell's hinged
<u>Kinixys erosa</u>	tortoise, Schweigger's hinge-back
<u>Kinixys homeana</u>	tortoise, Homer's hinged
<u>Malacochersus tornieri</u>	tortoise, pancake
<u>Manouria</u> (all species in genus)	tortoise
<u>Psammobates geometricus</u>	tortoise, cape geometric
<u>Pyxis arachnoides</u>	tortoise, spider
FAMILY Trionychidae	
<u>Chitra indica</u>	turtle, narrow-headed soft-shell
<u>Cyclanorbis elegans</u>	turtle, Nubian soft-shell
<u>Cyclanorbis senegalensis</u>	turtle, Senegal soft-shell
<u>Cycloderma aubryi</u>	turtle, Aubry's soft-shell
<u>Cycloderma frenatum</u>	turtle, bridled soft-shell
<u>Lissemys punctata</u>	turtle, Indian flap-shelled
<u>Pelochelys bibroni</u>	turtle, giant soft-shell
<u>Trionyx</u> (all species in genus)	turtle, soft-shell

FISHES

PHYLUM Chordata	
CLASS Chondrichthyes	
ORDER Carcharhiniformes	
FAMILY Carcharhinidae	
<u>Carcharhinus melanopterus</u>	shark, black-tip reef
<u>Cephaloscyllium ventriosum</u>	shark, swell

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
FAMILY Hemigaleidae <u>Triaenodon obesus</u>	shark, white-tip reef
FAMILY Triakidae <u>Rhinnotriakis henlei</u> <u>Triakis semifasciatum</u>	shark, smoothound shark, leopard
ORDER Heterodontiformes FAMILY Heterodontidae <u>Heterodontus zebra</u>	shark, highfin
ORDER Orectolobiformes FAMILY Brachaeluridae <u>Brachaelurus waddi</u>	shark, blind
FAMILY Ginglymostomatidae <u>Ginglymostoma cirratum</u>	shark, nurse
FAMILY Hemiscyllidae <u>Chiloscyllium colax</u> <u>Hemiscyllium ocellatum</u>	shark, banded shark, epaulette
FAMILY Stegostomatidae <u>Stegostoma fasciatum</u>	shark, zebra
CLASS Osteichthyes ORDER Acipenseriformes FAMILY Acipenseridae <u>Acipenser transmontanus</u>	sturgeon, white
ORDER Atheriniformes FAMILY Anablepidae <u>Anableps</u> (all species in genus) <u>Jenynsia</u> (all species in genus)	four-eyes livebearer
FAMILY Goodeidae <u>Allodontichthys</u> (all species in genus) <u>Allophorus</u> (all species in genus) <u>Allotoca</u> (all species in genus) <u>Ameca</u> (all species in genus) <u>Ataeniobius</u> (all species in genus) <u>Chapalichthys</u> (all species in genus) <u>Characodon</u> (all species in genus)	darther goodeid goodeid goodeid goodeid goodeid goodeid goodeid

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Girardinichthys</u> (all species in genus)	goodeid
<u>Goodea</u> (all species in genus)	goodea
<u>Hubbsina</u> (all species in genus)	goodeid
<u>Ilyodon</u> (all species in genus)	goodeid
<u>Neophorus</u> (all species in genus)	goodeid
<u>Skiffia</u> (all species in genus)	goodeid
<u>Xenophorus</u> (all species in genus)	goodeid
<u>Xenotaenia</u> (all species in genus)	goodeid
<u>Xenotoca</u> (all species in genus)	goodeid
<u>Zoogoneticus</u> (all species in genus)	goodeid
FAMILY Poeciliidae	
<u>Alfaro</u> (all species in genus)	livebearer
<u>Brachyrhaphis</u> (all species in genus)	bishop
<u>Carlhubbsia</u> (all species in genus)	widow
<u>Cnesterodon</u> (all species in genus)	millionfish
<u>Flexipenis</u> (all species in genus)	mosquitofish
<u>Gambusia</u> (all species in genus except <u>Gambusia</u> <u>amistadensis</u> , <u>G. gaigei</u> , <u>G. georgei</u> , <u>G. heterochir</u> and <u>G. nobilis</u>)	mosquitofish
<u>Girardinus</u> (all species in genus)	girardinus
<u>Heterandria</u> (all species in genus)	mosquitofish
<u>Heterophallus</u> (all species in genus)	strange-fin
<u>Limia</u> (all species in genus)	molly
<u>Neoheterandria</u> (all species in genus)	killifish
<u>Phallichthys</u> (all species in genus)	widow
<u>Phalloceros</u> (all species in genus)	livebearer
<u>Phalloptychus</u> (all species in genus)	livebearer
<u>Phallotorynus</u> (all species in genus)	livebearer
<u>Poecilia</u> (all species in genus)	molly
<u>Poeciliopsis</u> (all species in genus except <u>Poeciliopsis</u> <u>occidentalis</u>)	livebearer
<u>Priapella</u> (all species in genus)	livebearer
<u>Priapichthys</u> (all species in genus)	diamond-scale
<u>Pseudopoecilia</u> (all species in genus)	diamond-scale
<u>Quintana</u> (all species in genus)	livebearer
<u>Scolichthys</u> (all species in genus)	mosquitofish
<u>Tomeurus</u> (all species in genus)	prongfin

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Xenodexia</u> (all species in genus)	livebearer
<u>Xenophallus</u> (all species in genus)	mosquitofish
<u>Xiphophorus</u> (all species in genus)	platy
ORDER Cypriniformes	
FAMILY Cyprinidae	
<u>Aristichthys nobilis</u>	carp, bighead
<u>Ctenopharyngodon idellus</u>	carp, grass (white amur)
<u>Hypophthalmichthys molitrix</u>	carp, silver
<u>Mylopharyngodon piceus</u>	carp, black
ORDER Gonorynchiformes	
FAMILY Chanidae	
<u>Chanos chanos</u>	milkfish
ORDER Perciformes	
FAMILY Centrarchidae	
<u>Micropterus salmoides</u> <u>floridanus</u>	bass, Florida largemouth
FAMILY Centropomidae	
<u>Lates calcarifer</u>	bass, Asian sea
FAMILY Channidae	
<u>Ophiocephalus (Channa) striatus</u>	pongee (snakehead)
FAMILY Cichlidae	
<u>Oreochromis aureus</u>	tilapia, blue
<u>Oreochromis mossambicus</u>	tilapia, Mozambique
<u>Oreochromis niloticus</u>	tilapia, Nile
<u>Oreochromis spilurus</u>	tilapia
<u>Paretroplus polyactis</u>	cichlid, Damba
<u>Paretroplus</u> sp. "lamena"	cichlid, Damba
FAMILY Percichthyidae	
<u>Morone saxatilis</u> x <u>Morone chrysops</u>	bass, hybrid striped
FAMILY Potophaenidae	
<u>Coryphaena hippurus</u>	mahimahi
ORDER Pleuronectiformes	
FAMILY Bothidae	
<u>Paralichthys olivaceus</u>	flounder, Japanese (hirame)
FAMILY Pleuronectidae	
<u>Hippoglossus hippoglossus</u>	halibut, Atlantic
<u>Hippoglossus stenolepis</u>	halibut, Pacific

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Salmoniformes	
FAMILY Salmonidae	
<u>Oncorhynchus kisutch</u>	salmon, coho
<u>Oncorhynchus mykiss</u>	trout, rainbow
<u>Oncorhynchus tshawytscha</u>	salmon, Chinook
<u>Salmo gairdnerii</u>	trout, rainbow
<u>Salmo salar</u>	salmon, atlantic
ORDER Scorpaeniformes	
FAMILY Anoplopomatidae	
<u>Anoplopoma fimbria</u>	sablefish

BIRDS

(Taxonomy after Sibley and Monroe 1990)

PHYLUM Chordata	
CLASS Aves	
ORDER Anseriformes	
FAMILY Anatidae	
<u>Aix galericulata</u>	duck, mandarin
<u>Aix sponsa</u>	duck, wood
<u>Alopochen aegyptiacus</u>	goose, Egyptian
<u>Anas acuta</u>	duck, north pintail
<u>Anas americana</u>	wigeon (duck), American
<u>Anas bahamensis</u>	duck, Bahama pintail (white-cheeked)
<u>Anas capensis</u>	duck (teal), cape
<u>Anas clypeata</u>	duck, northern shoveler
<u>Anas crecca</u>	duck (teal), green wing
<u>Anas cyanoptera</u>	duck (teal), cinnamon
<u>Anas discors</u>	duck (teal), blue wing
<u>Anas flavirostris</u>	duck (teal), Chilean
<u>Anas penelope</u>	duck, European wigeon (Eurasian)
<u>Anas platyrhynchos laysanensis</u>	duck (teal), Laysan
<u>Anas platyrhynchos wyvilliana</u>	duck (teal), Hawaiian
<u>Anas sibilatrix</u>	wigeon (duck), Chiloe
<u>Anas undulata</u>	duck, African yellowbill
<u>Anser caerulescens</u>	goose, lesser snow
<u>Anser canagicus</u>	goose, emperor
<u>Anser indicus</u>	goose, bar-headed
<u>Aythya americana</u>	duck, red head
<u>Aythya fuligula</u>	duck, tufted
<u>Aythya valisineria</u>	duck, canvasback
<u>Biziura lobata</u>	duck, musk
<u>Branta (Nesochen) sandvicensis</u>	goose, nene

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Branta bernicla</u>	goose, brant
<u>Branta canadensis</u>	goose, Canadian
<u>Branta canadensis minima</u>	goose, cackling (Canada)
<u>Branta ruficollis</u>	goose, red-breasted
<u>Calonetta leucophrys</u>	teal, ringed
<u>Cereopsis novaehollandiae</u>	goose, Cape Barren
<u>Chloephaga melanoptera</u>	goose, Andean
<u>Chloephaga picta leucoptera</u>	goose, Andean (greater Magellan)
<u>Chloephaga poliocephala</u>	goose, ashy-headed
<u>Cyanochen cyanopterus</u>	goose, Abyssinian blue wing
<u>Cygnus</u> (all species in genus)	swan
<u>Dendrocygna arborea</u>	duck, black-billed whistling
<u>Dendrocygna arcuata</u>	duck, wandering whistling
<u>Dendrocygna autumnalis</u>	duck, red-billed whistling
<u>Dendrocygna bicolor</u>	duck, fulvous tree (fulvous whistling)
<u>Dendrocygna eytoni</u>	duck, Eyton tree (plumed whistling)
<u>Dendrocygna viduata</u>	duck, white-faced tree (whistling)
<u>Heteronetta atricapilla</u>	duck, black-headed
<u>Merganetta armata</u>	duck, torrent
<u>Mergus cucullatus</u>	duck, hooded merganser
<u>Mergus merganser</u>	duck, goosander (merganser)
<u>Mergus octosetaceus</u>	duck, Brazilian merganser
<u>Neochen jubatus</u>	goose, Orinoco
<u>Netta erythrophthalma</u>	pochard
<u>Netta peposaca</u>	rosy-bill
<u>Netta rufina</u>	pochard, red-crested
<u>Oxyura jamaicensis</u>	duck, North American ruddy
<u>Sarkidiornis melanotos</u>	duck, comb
<u>Somateria mollissima</u>	duck, common eider
<u>Somateria mollissima dresseri</u>	duck, American eider
<u>Tadorna</u> (all species in genus)	shelduck
ORDER Charadriiformes	
FAMILY Scolopacidae	
<u>Numenius tahitiensis</u>	curlew, bristle-thighed
ORDER Ciconiiformes	
FAMILY Ardeidae	
<u>Nycticorax nycticorax</u>	heron, black-crowned night
FAMILY Ciconiidae	
<u>Ciconia ciconia</u>	stork, white
<u>Mycteria ibis</u>	stork, yellow-billed

SCIENTIFIC NAMECOMMON NAME

FAMILY Phoenicopteridae
Phoeniconaias minor
Phoenicopterus chilensis
Phoenicopterus ruber

flamingo, African lesser
 flamingo, Chilean
 flamingo, rosy (scarlet),
 American

FAMILY Threskiornithidae
Ajaia ajaja
Eudocimus ruber
Hagedashia hagedash
Platalea alba
Threskiornis aethiopicus

spoonbill, roseate
 ibis, scarlet
 ibis, hadada
 spoonbill, African
 ibis, sacred

ORDER Cuculiformes
 FAMILY Musophagidae
Tauraco hartlaubi

turaco, blue-crested

ORDER Gruiformes
 FAMILY Gruidae
Anthropoides paradisea
Anthropoides virgo
Balearica pavonina

crane, Stanley (paradise)
 crane, Demoiselle
 crane, crown of Africa
 (crowned)
 crane, sarus
 crane, sandhill

Grus antigone
Grus canadensis

FAMILY Rallidae
Fulica americana alai
Gallinula chloropus
sandvicensis

coot, Hawaiian
 gallinule, Hawaiian

ORDER Pelecaniformes
 FAMILY Fregatidae
Fregata minor
Fregata minor palmerstoni

frigate bird, great
 frigate bird

FAMILY Phaethontidae
Phaethon lepturus
Phaethon rubricauda

tropicbird, white-tailed
 tropicbird, red-tailed

FAMILY Sulidae
Sula dactylatra
Sula leucogaster
Sula nebouxii
Sula sula

booby, blue-faced (masked)
 booby, brown
 booby, blue-footed
 booby, red-footed

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
ORDER Procellariiformes	
FAMILY Diomedeidae	
<u>Diomedea immutabilis</u>	albatross, Laysan
<u>Diomedea nigripes</u>	albatross, black-footed
ORDER Psittaciformes	
FAMILY Psittacidae	
<u>Coracopsis nigra</u>	parrot, black
<u>Coracopsis vasa</u>	parrot, vasa
<u>Psittacula krameri</u>	parakeet, rose-ringed (ringnecked)
<u>Rhynchopsitta pachyrhyncha</u>	parrot, thick-billed
ORDER Sphenisciformes	
FAMILY Spheniscidae	
Spheniscidae (all species in family)	penguins
ORDER Struthioniformes	
FAMILY Struthionidae	
<u>Struthio camelus</u>	ostrich

MAMMALS

PHYLUM Chordata	
CLASS Mammalia	
ORDER Artiodactyla	
FAMILY Bovidae	
<u>Aepyceros melampus</u>	impala
<u>Ammotragus lervia</u>	sheep, barbary (aoudad)
<u>Antilope cervicapra</u>	antelope, blackbuck
<u>Bison bison</u>	bison
<u>Capra falconeri</u>	markhor
<u>Capra ibex</u>	ibex
<u>Gazella dama</u>	gazelle, dama
<u>Hippotragus niger</u>	antelope, sable
<u>Oryx beisa beisa</u> (=O. <u>gazella beisa</u>)	oryx, beisa
<u>Ovis musimon</u>	sheep, mouflon
<u>Tragelaphus imberbis</u>	kudu, lesser
<u>Tragelaphus oryx</u> (=Taurotragus <u>oryx</u>)	eland, common
<u>Tragelaphus scriptus</u>	bushbuck
<u>Tragelaphus strepsiceros</u>	kudu, greater
FAMILY Cervidae	
<u>Axis axis</u> (=Cervis <u>axis</u>)	deer, axis
<u>Cervus elaphus</u>	elk

<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Rangifer tarandus</u>	reindeer
FAMILY Giraffidae	
<u>Giraffa</u> sp.	giraffe
ORDER Carnivora	
FAMILY Mustelidae	
<u>Lutra perspicillata</u>	otter, Malayan smooth
FAMILY Otariidae	
<u>Zalophus californianus</u>	sea lion
FAMILY Phocidae	
<u>Monachus schauinslandii</u>	seal, Hawaiian monk
ORDER Diprotodontia (=Marsupialia)	
FAMILY Macropodidae	
<u>Macropus eugenii</u>	wallaby, dama
<u>Macropus robustus</u>	wallaro, Woodward's
<u>Macropus rufogriseus</u>	wallaby, Bennett's
<u>Macropus rufus</u>	kangaroo, red
ORDER Odontoceti (=Cetacea)	
FAMILY Delphinidae	
<u>Globicephala macrorhynchus scammoni</u>	whale, Pacific pilot
<u>Pseudorca crassidens</u>	whale, false killer
<u>Tursiops truncatus</u>	porpoise, bottlenosed
ORDER Perissodactyla	
FAMILY Equidae	
<u>Equus burchelli</u>	zebra, plains
<u>Equus burchelli bohmi</u>	zebra, Grant
ORDER Pinnipedia	
FAMILY Phocidae	
<u>Phoca vitulana</u>	seal, harbor
ORDER Primates	
FAMILY Callithricidae	
Callithricidae (all species in family)	monkey, marmosets, tamarins
FAMILY Cebidae	
Cebidae (all species in family)	monkey, new world

SCIENTIFIC NAMECOMMON NAME

FAMILY Cercopithecidae
 Cercopithecidae (all species in
 family)

monkey, old world;
 baboon; colobus; langur,
 macaque

FAMILY Hylobatidae
Hylobates (all species in genus)

gibbons

FAMILY Lemuridae
 Lemuridae (all species in family)

lemur, bush baby (Galago)

FAMILY Lorisidae
Nycticebus coucang
Perodicticus potto

loris, slow
 potto

FAMILY Pongidae
Gorilla gorilla
Pan troglodytes
Pan paniscus
Pongo pygmaeus

gorilla
 chimpanzee
 chimpanzees
 orangutan

V. Administrative Matters

A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, HRS