

Application to

Determine grounds for a reassessment

of an existing new organisms approval

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ENVIRONMENTAL RISK MANAGEMENT AUTHORITY



NGĀ KAIWHAKATŪPATO WHAKARARU TAIAO

Publication number 140/01

Please note

This application form is to be used for determining if there are **grounds** for a reassessment of an existing new organisms approval under s62 of the Hazardous Substances and New Organisms (HSNO) Act. The Authority will only agree to undertake a reassessment of a new organism approval if it is found that there are grounds for a reassessment. Organisms that were approved for release without controls cannot be reassessed.

This is the approved form for the purposes of the HSNO Act and replaces all other previous versions.

Any extra material that does not fit in the application form must be clearly labelled, cross-referenced and included as appendices to the application form.

Confidential information must be collated in a separate appendix. You must justify why you consider the material confidential and make sure it is clearly labelled as such.

If technical terms are used in the application form, explain these terms in plain language in the Glossary (Section 4 of this application form).

You must sign the application form and enclose the application fee (including GST). ERMA New Zealand will not process applications that are not accompanied by the correct application fee. For more information regarding fees refer to our Fees and Charges Schedule on our website at www.ermanz.govt.nz.

Unless otherwise indicated, all sections of this form must be completed to the best of your ability for the application to be processed.

Please provide an electronic version of the completed application form, as well as a signed hard copy.

Applications to determine grounds for a reassessment are not publicly notified.

We recommend you contact a New Organism Advisor at ERMA New Zealand (or email noinfo@ermanz.govt.nz) before you complete this application form. We can help you scope and prepare your request.

This form was approved on 23 December 2010 by the Chief Executive of ERMA New Zealand acting under delegation from the Authority.

Section 1: Application details

a) Application title

Reassessment of zoo animals approved or deemed approved for importation into containment.

b) Organisation name

ERMA New Zealand

c) Postal address

BP House, 20 Customhouse Quay, PO Box 131, Wellington 6140

Section 2: Identification of the organism and proposed approval to be reassessed

a) Organism details

Genus:	see appendix one
Species:	

b) Approval/application code listed on ERMA decision document

See appendix one

Section 3: Describe the grounds for a reassessment – more than one may be relevant

	Yes	No
There is new information about the effects of the organism	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There has been a change in the use of the organism	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) Provide details to support your answer

In 1998 the HSNO Act made transitional provisions for new organisms held in zoological gardens under s255 (expired). As a result, those organisms lawfully held in a lawfully registered circus or zoo were deemed to be new organisms, and the registration of the facility under the Zoological Garden Regulations 1977 was deemed to be an approval to import those organisms under s45 of the HSNO Act. Subsequently the Zoo Standard was applied as the minimum controls to contain these organisms.

ERMA New Zealand has recognised more than 150 species of animals as being “deemed approved” for importation into containment under s255. These species have not been assessed under the HSNO Act framework.

In contrast ERMA New Zealand has assessed and approved with controls over 200 new organism species, or groups of species, for import into containment for the purposes of public display, and/or conservation and research. There is a gap in our knowledge as to whether the controls on “deemed approved” animals are adequate and consistent with those controls applied to animals approved after 1998. A reassessment of the “deemed approved” animals would provide an opportunity to assess and put into place consistent and risk mitigating controls.

Change in the use of the organisms

Under the Zoological Gardens Regulation 1977 the “deemed approved” animals had been imported and subsequently bred in captivity for *the purposes of public exhibition or entertainment, and includes a circus, a marine park, an aquarium, and an oceanarium*. Under the HSNO Act the Authority may approve the importation of new organisms for a specified list of purposes (s39(1)) which includes in s39(1)(e) *the public display of any organism including, but not limited to, display in a circus or zoological garden*. As a consequence almost all import into containment approvals given under the HSNO Act for zoo species are for the single purpose of *public display*.

The HSNO Act does not have a concept of a zoo but rather import and maintenance of a new organism into containment for a purpose. Modern zoos are not limited to public display and see their

role as including education and conservation through research, funding of in-situ projects and captive breeding programmes.

“Zoos, aquariums and botanic gardens can operate across the whole spectrum of conservation activities, from ex situ breeding of threatened species, research, public education, training and influencing and advocacy, through to in situ support of species, populations and their habitats; they uniquely have a massive ‘captive audience’ of visitors whose knowledge, understanding, attitude, behaviour and involvement can all be positively influenced and harnessed.” ARAZPA, 2006.

The Agency approach to more recent applications made by zoos is to recognise that public display is only part of their function. Consequently the purpose of the importation defined in recent approvals has also included education, the conservation of genetic material (through captive breeding) and research.

A reassessment of the deemed approved animals, as well as some of the older HSNO Act approvals, would be to extend the purposes of import and maintenance in containment, and bring consistency to the approvals.

Information about effects

For those organisms ‘deemed approved’ for containment in zoos, the risks, costs and benefits were not assessed.

There is now additional information about the adverse effects of some zoo animals that are approved or deemed approved for containment. There have been a number of incidents involving “deemed approved” animals reported to the Authority in recent years. Those incidents range from escapes from enclosures within facilities to a mauling resulting in the death of a worker. This new information will be taken into account when assessing the adverse effects of these “deemed approved” animals held in containment.

There is also additional information about the beneficial effects of the “deemed approved” animals being in containment. Zoological gardens were originally intended for entertainment, and to offer the opportunity to see exotic animals to those people who would not normally get such a chance.

The conservation and education of the public are now a major part of the operation of a zoo, and are benefits of having zoo animals in containment. Therefore those benefits will be taken into account when reassessing the effects of zoo animals held in containment.

Containment of new organisms

From the 29 of July 1998 until the 29 July 2003 “deemed approved” animals (under s255) were subject to the Zoological Gardens Regulations 1977. From the date that they expired the regulations were superseded by the MAF/ERMA Zoo Standard. In general zoological gardens are different from other “containment facilities” such as laboratories because of the presence of members of the public.

Other information

Currently the organisms that are deemed approved for containment are not searchable on the ERMA website, and due to the nature of the approvals (deemed) there are no decision or control documents available for those organisms either. This can lead to confusion for the facilities holding these organisms around what their obligations are, and for enforcement staff when auditing those facilities. The reassessment will result in all the organisms subject to the reassessment being searchable on the website, and there will be a decision document outlining the controls.

A reassessment will also enable the Authority to make controls consistent for all organisms and facilities holding zoo animals.

Section 4: List of appendices and referenced material (if applicable)

a) List of appendices attached

Appendix Number	Title
1	Zoo animals approved or deemed approved for import into containment.

b) List of references used – hard copies must be attached to the application form.

Author	Title	Journal

Section 5: Declaration and signing the application form

In preparing this application I have:

- taken into account the ethical principles and standards described in the ERMA New Zealand Ethics Framework Protocol (<http://www.ermanz.govt.nz/resources/publications/pdfs/ER-PR-05-1.pdf>);
- identified any ethical considerations relevant to this application that I am aware of;
- ensured that my answers contain an appropriate level of information about any ethical considerations identified, and provided information about how these have been anticipated or might be mitigated; and
- contacted ERMA New Zealand staff for advice if in doubt about any ethical considerations.

I have completed this application to the best of my ability and, as far as I am aware, the information I have provided in this application form is correct.

Signed _____
Signature of applicant or person authorised to sign on behalf of applicant

Date _____

Before submitting your application you must ensure that:

- all sections are completed;
- appendices (if any) are attached;
- copies of references (if any) are attached;
- any confidential information identified and enclosed separately;
- the application is signed and dated;
- your application fee has been paid or is enclosed; and
- an electronic copy of the final application is e-mailed to ERMA New Zealand.

Appendix One: Zoo animals approved or deemed approved for import into containment.

Species	Common name	Approval(s)
<i>Abatus shackletoni</i> Koehler, 1911	sea urchin (echinoids)	PRE008972
<i>Acinonyx jubatus</i> (Schreber, 1775)	cheetah	PRE008902
<i>Acondaster conspicuous</i>	yellow starfish	PRE008973
<i>Acondaster hodgsoni</i>	yellow starfish	PRE008974
<i>Acrobates pygmaeus</i> Shaw, 1793	feather tailed glider	NOC002541+
<i>Adamussium colbecki</i> Smith 1902	Antarctic Scallop (mollusc)	PRE008975
<i>Aerothyris fragilis</i> (Smith, 1907)	Brachiopod (mollusc)	PRE008976
<i>Aerothyris joubini</i> (Blochmann, 1906)	Brachiopod (mollusc)	PRE008977
<i>Ailuropoda melanoleuca</i> (David, 1869)	giant panda	NOC100015+
<i>Ailurus fulgens</i> (F.G. Cuvier, 1825)	red panda	PRE008903 NOC100019*
<i>Alcyonium paessleri</i> May, 1899	solitary coral (Alconarian)	PRE008978
all animals of the genus <i>Canis</i> (excluding <i>C. familiaris</i>)	canis	NOC002510
All species of Bovidae, excluding the subfamily Caprinae (chamois, goats, sheep, serows and relatives) and genera <i>Bos</i> (oxen and true cattle), <i>Bubalus</i> (water buffalo), and <i>Syncerus</i> (African buffalo)	antelope, cattle, gazelles, pronghorn antelope	NOC002511 NOC100023*
<i>Alligator mississippiensis</i> (Daudin, 1801)	American alligator	PRE009038
<i>Ammonothea striata</i> (Möbius, 1902) (syn. <i>Thaumastopycnon striata</i> (Möbius, 1902))	sea spider	PRE008979
<i>Anaea euryple</i> Felder 1862 (syn. <i>Memphis euryppyle</i> (Felder, 1863))	butterfly	NOC100037
<i>Anartia fatima</i> Fabricius 1793	banded peacock butterfly	NOC002394
<i>Anetia thirza</i> Geyer 1833	cloud-forest monarch butterfly	NOC002395
<i>Anosia genutia</i> Cramer 1779 (syn. <i>Danaus genutia</i>)	orange tiger butterfly	NOC002396
<i>Anoxycalyx</i> (Scolymastra) <i>joubini</i> Topsent 1916	glass sponge	PRE008980
<i>Anteos clorinde</i> (Godart, 1824)	white angled sulphur butterfly	NOC100044
<i>Anthometra adriani</i> (Bell, 1908)	feather star	PRE008981
<i>Antidorcas marsupialis</i> (Zimmerman, 1780)	springbok	PRE008905 (also see NOC002511) NOC002494* (also see NOC100023*)
<i>Antilope cervicapra</i> (Linnaeus, 1758)	blackbuck	PRE008907 (also see NOC002511) NOC002495* (also see NOC100023*)
<i>Aonyx cinerea</i> (Illiger, 1815) (syn. <i>Amblonyx cinereus</i> (Illiger, 1815), <i>Aonyx cinereus</i> (Illiger, 1815), <i>Aonyx cineria</i>)	oriental short (small) clawed otter	PRE008904 PRE008896
<i>Apalone ferox</i>	Florida soft shell turtle	PRE100002

<i>Aphonopelma moderatum</i> (Chamberlin & Ivie, 1939)	Rio Grande gold tarantula (spider)	PRE001042
<i>Aphonopelma seemani</i> (F.O.P.- Cambridge, 1897)	Costa Rican zebra tarantula	PRE001043
<i>Archaeoprepona demophon</i> (Linnaeus, 1758) (syn. <i>Prepona demophon</i> (Linnaeus, 1758))	one spotted prepona butterfly	NOC100045
<i>Artemidactis victrix</i> Stephenson 1918	sea anemone	PRE008982
<i>Ateles belzebuth</i>	long haired spider monkey	PRE008908
<i>Ateles geoffroyi</i>	black handed/Central American spider monkey	PRE008911
<i>Atolla wyvillei</i> Haeckel 1880	jellyfish	PRE008983
<i>Attacus atlas</i> (Linnaeus, 1758)	atlas moth	NOC000023
<i>Avicularia urticans</i> (Schmidt, 1994)	Peruvian pinktoe tarantula	PRE001044
<i>Bathyraco antarcticus</i> Gunther 1878	Dragonfish (Bathyracoridae)	PRE008984
<i>Battus belus</i>	butterfly	NOC000024
<i>Battus polydamus</i>	butterfly Polydamus swallowtail	NOC000076
<i>Beroe cucumis</i> Fabricius 1780	Sea gooseberry	PRE008985
<i>Biblis hyperia</i> Cramer 1779	red rim butterfly	NOC100038
<i>Boselaphus tragocamelus</i> (Pallas, 1766)	nilgai	PRE008913 (also see NOC002511) NOC002496* (also see NOC100023*)
<i>Brachylophus fasciatus</i>	Fiji island banded iguana	PRE100003
<i>Brachylophus vitiensis</i>	Fiji Island crested iguana	NOC002116
<i>Brachypelma smithi</i> (Cambridge, 1897)	Mexican red-kneed tarantula	PRE001045
<i>Caligo atreus</i> Kollar 1894	owl butterfly	NOC100024
<i>Caligo eurilochus</i> (Cramer, 1775)	butterfly	NOC000030
<i>Caligo illioneus</i> (Cramer, 1776)	giant owl butterfly	NOC100046
<i>Caligo memnon (idomeneus)</i> (syn. <i>Caligo idomeneus</i>)	owl butterfly	NOC000063
<i>Caligo teucer</i>	butterfly cocoa mart bleu	NOC000033
<i>Callianira cristata</i> Moser 1909	sea gooseberry	PRE008986
<i>Callicore pitheas</i> (Latreille, 1813)	butterfly	NOC100047
<i>Callithrix pygmaea</i> (Spix 1823) (syn. <i>Cebuella pygmaea</i>)	pygmy marmoset	NOC002393
<i>Camelus dromedarius</i>	dromedary camel (Arabian camel)	PRE008914
<i>Canis latrans</i>	coyote	PRE008915 (also see NOC002510)
<i>Caracal caracal</i> Schreber, 1776 (syn. <i>Felis caracal</i>)	caracal	NOC002542+
<i>Carbasea ovoidea</i> Busk, 1852	bryozoan	PRE008987
<i>Carcharias taurus</i> (Rafinesque, 1810)	grey nurse shark	PRE100000
<i>Catonephele godmanni</i> Stichel 1901	butterfly	NOC002397
<i>Catonephele mexicana</i> Jenkins 1983 (<i>Catonephele mexicana</i> Jenkins & Maza, 1985)	Guatemalan catone butterfly	NOC002398
<i>Catonephele numilia</i> Cramer 1776	common catone butterfly	NOC002399

<i>Catonephele orites</i> Stichel 1898	orange-banded shoemaker butterfly	NOC002400
<i>Catopsilia pomona</i> (Fabricius, 1775)	common/lemon emigrant butterfly	NOC000056
<i>Catopuma temminckii</i> (syn. <i>Pardofelis temminckii</i> , <i>Felis temmincki</i>)	Asian golden cat	PRE008916
<i>Cebus apella</i>	brown capuchin monkey	PRE008918
<i>Cepora aspasia</i> (Stoll, 1790)	butterfly	NOC100048
<i>Ceratotherium simum</i> (Burchell, 1817)	white rhinoceros	PRE008919 NOC002497*
<i>Cercopithecus aethiops</i>	vervet monkey	PRE008920
<i>Cethosia biblis</i> (Drury, 1773)	butterfly red lacewing	NOC000031
<i>Cethosia cydippe</i> (Linnaeus, 1767)	butterfly	NOC000084
<i>Cethosia hypsea</i> Doubleday 1847	lacewing butterfly	NOC002401
<i>Cethosia penthesilea</i> (Cramer 1777)	butterfly orange lacewing	NOC000061
<i>Chamaeleo jacksonii</i>	Jacksons chameleon	PRE100004
<i>Charaxes bupalus</i> (Staudinger, 1889)	butterfly	NOC100049
<i>Charaxes castor</i> Cramer 1775	giant charaxes butterfly	NOC002402
<i>Charaxes harmodius</i> (Felder, 1866)	butterfly	NOC100050
<i>Charaxes polyxena</i> Cramer 1775	butterfly	NOC002403
<i>Chionodraco hamatus</i> (Lonnberg 1905) (syn. <i>Chionodraco kathleenae</i>)	Antarctic icefish	PRE000672
<i>Chlosyne gaudialis</i> Bates 1864	butterfly	NOC002404
<i>Chlosyne janais</i> Drury 1782	crimson patch/ Janais patch butterfly	NOC002405
<i>Chrysidia rhipheus</i> Drury 1773 (syn. <i>Urania rhipheus</i>)	moth	NOC002406
<i>Chrysocyon brachyurus</i> Illiger 1815	maned wolf	NOC002481
<i>Cinachyra antarctica</i> Carter 1872	finger sponge	PRE008988
<i>Citharischius crawshayi</i> (Pocock, 1900)	king baboon tarantula	PRE001046
<i>Cnemidocarpa verrucosa</i> (Lesson, 1830)	sea squirt (Ascidian)	PRE008989
<i>Colobus guereza</i> Rüppell, 1835	black and white colobus	NOC002543+
<i>Colossendeis megalonyx</i> Fry & Hedgpeth, 1969	sea spider	PRE008990
<i>Colossendeis robusta</i> Hoek, 1881	sea spider	PRE008991
<i>Consul fabius</i> Cramer 1779	tiger striped leafwing butterfly	NOC100039
<i>Coscinocera hercules</i>	Hercules moth	NOC000052
<i>Cressida cressida</i> (syn. <i>Papilio cressida</i>)	big greasy butterfly	NOC000025
<i>Crocodylus porosus</i> (Schneider, 1801)	salt water / estuarine crocodile	PRE009039
<i>Crocuta crocuta</i> Erxleben, 1777	spotted hyena	NOC002544+
<i>Cryodraco antarcticus</i> (Dollo 1900)	Antarctic fish	PRE000676
<i>Dama ruficollis</i>	Addra gazelle	PRE008921 (also see NOC002511)
<i>Danaus chrysippus</i> (syn. <i>Anosia chrysippus</i>)	lesser wanderer/plain tiger/common tiger butterfly	NOC000075

<i>Danaus genutia</i> (Cramer, 1779)	common tiger butterfly	NOC100051
<i>Danaus gilippus</i>	Queen butterfly	NOC000081
<i>Danaus limniace</i> (Stoneham 1958)	butterfly	NOC000040
<i>Danaus melanippus</i> (Cramer, 1777)	white tiger butterfly	NOC100052
<i>Dasyprocta aguti</i> (syn. <i>Dasyprocta leporina</i>)	Brazilian (golden) agouti	PRE008922
<i>Delias hyparete</i> (Linnaeus, 1758)	painted jezebel butterfly	NOC100053
<i>Delolopoda austinius</i>	sea spider	PRE008992
<i>Delolopoda corrugatus</i>	sea spider	PRE008993
<i>Desmonema gaudichaudi</i> Lesson 1830	jellyfish	PRE008994
<i>Diceros bicornis</i> Linnaeus, 1758	black rhinoceros	NOC002545†
<i>Dione juno</i>	Flambeau butterfly	NOC000043
<i>Diplasterias brucei</i> Koehler 1908	sea star	PRE008995
<i>Dissostichus mawsoni</i> (Norman 1937)	Antarctic fish	PRE000675
<i>Doleschallia bisaltide</i>	leafwing butterfly	NOC000055
<i>Dolichotis patagonum</i> (Zimmermann, 1780)	Patagonian mara/cavy	PRE008923
<i>Dryadula phaetusa</i> Linnaeus 1758	banded orange heliconia	NOC100028
<i>Dryas julia</i> (<i>Dryas iulia</i>)	Julia butterfly	NOC000054
<i>Dynamine mylitta</i> Cramer 1780	butterfly	NOC002407
<i>Dysphania fenestrata</i>	four o'clock moth	NOC000021
<i>Edwardsia meridionalis</i> Williams 1981	sea anemone	PRE008996
<i>Elephas maximus</i>	Asiatic elephant	PRE008924
<i>Epimeriella macronyx</i> Walker 1906	amphipod (zooplankton)	PRE008997
<i>Equus burchellii</i> (Gray, 1824)	zebra	PRE008927 NOC002498*
<i>Eretmochelys imbricata</i>	Hawks billed turtle	PRE100005
<i>Eryphanis polyxena</i> (Meerburgh, 1775)	purple mort bleu butterfly	NOC100054
<i>Eueides aliphera</i> Godart 1819	aliphera longwing butterfly	NOC100029
<i>Eueides isabella</i> Cramer 1781	Isabella's heliconian butterfly	NOC000050
<i>Euphausia crystallorophias</i> Holt and Tattersall, 1906	krill	PRE008998
<i>Euphausia superba</i> Dana 1850	krill	PRE008999
<i>Euploea core</i> (Cramer, 1780)	common Indian crow butterfly	NOC000035
<i>Euploea mulciber</i>	striped blue crow butterfly	NOC000087
<i>Euploea sylvester</i> (Fabricius, 1793)	double-banded crow butterfly	NOC100055
<i>Eurema nicippe</i> (Cramer, 1779) (syn. <i>Abaeis nicippe</i>)	sleepy orange butterfly	NOC000042
<i>Eurema nise</i> Cramer 1775	mimosa yellow butterfly	NOC002408
<i>Eurytides branchus</i> Doubleday 1846	butterfly	NOC002409
<i>Eurytides epidaus</i> Doubleday 1846	Guatemalan kite -swallowtail butterfly	NOC002410
<i>Eurytides marcellus</i>	zebra swallowtail butterfly	NOC000093
<i>Eurytides phaon</i> Boisduval 1836	butterfly	NOC002411
<i>Euthalia adonia</i> (Cramer, 1782)	green baron butterfly	NOC100056
<i>Felis margarita</i> Loche, 1858	sand cat	NOC002546†
<i>Felis nigripes</i> Burchell, 1824	black footed cat	NOC002547†

<i>Galago moholi</i> A. Smith, 1836	Moholi bush baby	NOC002548+
<i>Galago senegalensis</i> É. Geoffroy Saint-Hilaire, 1796	Sengal bush baby	NOC002549+
<i>Gardineria antarctica</i> Gardiner 1929	solitary coral (Alconarian)	PRE009000
<i>Gardineria lillei</i>	solitary coral (Alconarian)	PRE009001
<i>Gehyra australis</i>	house gecko	PRE100008
<i>Gekko monarchus</i>	house gecko	PRE100007
<i>Geochelone carbonaria</i>	red-footed tortoise	PRE100009
<i>Geochelone chilensis</i>	chaco tortoise	PRE100010
<i>Geochelone denticulata</i>	yellow-footed tortoise	PRE100011
<i>Geochelone elegans</i>	star tortoise	PRE100012
<i>Geochelone nigra</i>	Galapagos tortoise	PRE100013
<i>Giraffa camelopardalis</i> (Linnaeus, 1758)	giraffe	PRE008929 NOC002484*
<i>Glyptonotus antarcticus</i> Eights, 1853	giant isopod	PRE009002
<i>Godyris zavaleta</i> (Hewitson, 1855)	butterfly	NOC100057
<i>Gopherus agassizii</i>	desert tortoise	PRE100014
<i>Gopherus berlandieri</i>	Texas tortoise	PRE100015
<i>Gorilla gorilla</i> (Savage and Wyman, 1847)	gorilla	NOC002550+
<i>Grammostola pulchra</i> (Mello-Leitao, 1921)	Brazilian black tarantula	PRE001048
<i>Grammostola rosea</i> (Walckenaer, 1837)	Chilean rose tarantula	PRE001047
<i>Graphium agamemnon</i> (Linnaeus, 1758)	tailed jay butterfly	NOC000046
<i>Graphium angolanus</i> Goeze 1779	butterfly	NOC002412
<i>Graphium antheus</i> Cramer 1779	butterfly	NOC002413
<i>Graphium eurypylus</i>	green spotted triangle butterfly	NOC000047
<i>Graphium sarpedon</i> (Linnaeus, 1758)	blue triangle butterfly	NOC000027
<i>Greta nero</i> (Hewitson, 1854)	butterfly	NOC100058
<i>Greta oto</i>	butterfly	NOC000048
<i>Grus rubicunda</i>	Australian crane	PRE100016
<i>Gymnodraco acuticeps</i> (Boulenger 1902)	Antarctic ploughfish (family Bathydraconidae)	PRE000671
<i>Haliclona (Rhizoniera) dancoi</i> Topsent 1901	finger sponge	PRE009003
<i>Hamadryas amphinome</i> Linnaeus 1767	butterfly	NOC100040
<i>Hamadryas arinome</i> Lucas 1853	butterfly	NOC002414
<i>Hamadryas chloe</i> Stoll 1787	butterfly	NOC002415
<i>Hamadryas februa</i> Hubner 1823	gray cracker butterfly	NOC002416
<i>Hamadryas feronia</i> Linnaeus 1758	variable cracker butterfly	NOC002417
<i>Hamadryas fornax</i> Hubner 1823	orange cracker butterfly	NOC002418
<i>Hamadryas guatemalina (guatemalena)</i> Bates 1864	Guatemalan cracker butterfly	NOC002419
<i>Hamadryas laodamia</i> (Cramer, 1777)	butterfly	NOC100059
<i>Helarctos malayanus</i>	Malayan sunbear	PRE008931
<i>Heliconius charithonia</i> (Linnaeus, 1767) (syn. <i>Heliconius charitonius</i>)	zebra butterfly	NOC000092
<i>Heliconius cydno</i>	butterfly	NOC000049

<i>Heliconius doris</i> (syn. <i>Laparus doris</i>)	Doris butterfly	NOC000041
<i>Heliconius hecale</i> Fabricius 1777	butterfly	NOC100030
<i>Heliconius hewitsoni</i> Staudinger 1875	butterfly	NOC100031
<i>Heliconius ismenius</i> Latreille 1817	butterfly	NOC100032
<i>Heliconius melpomene</i> (Linnaeus, 1758)	the postman butterfly	NOC000088
<i>Heliconius sapho</i> Drury 1782	butterfly	NOC100033
<i>Heliconius sara</i> Fabricius 1793	Sara longwing butterfly	NOC000051
<i>Hexaprotodon liberiensis</i> Morton, 1849	pygmy hippo	NOC002551+
<i>Hippopotamus amphibius</i>	hippopotamus	PRE008932
<i>Hippotragus niger</i> (Harris 1838)	sable antelope	PRE008933 (also see NOC002511) NOC002499* (also see NOC100023*)
<i>Historis acheronta</i> (Fabricius, 1775)	butterfly	NOC100060
<i>Hydrochaeris hydrochaeris</i> (Linnaeus, 1766)	capybara	PRE001041
<i>Hydrodendron arboreum</i> (Allman 1888)	hydroid	PRE009004
<i>Hylobates lar</i>	white-handed lar gibbon	PRE008934
<i>Hylobates leucogenys</i> (syn. <i>Nomascus leucogenys</i>)	white cheeked gibbon	PRE008935
<i>Hylobates muelleri</i>	Muller's Borean/grey gibbon	PRE008936
<i>Hylobates syndactylus</i>	Siamang gibbon	PRE008937
<i>Hypna clytemnestra</i> Cramer 1777	jazzy leafwing butterfly	NOC002420
<i>Hypolimnias alimena</i> Linnaeus 1758	blue banded eggfly butterfly	NOC000026
<i>Hypolimnias bolina</i> Linnaeus 1758	common eggfly butterfly	NOC000034
<i>Hystrix africaeaustralis</i> Peters 1852	cape porcupine	PRE001034
<i>Hystrix cristata</i> Linnaeus, 1758	crested porcupine	PRE008938
<i>Idea leuconoe</i> Erichson 1834	butterfly	NOC100027
<i>Ideopsis gaura</i> Horsfield 1829	butterfly	NOC000053
<i>Iguana iguana</i> (Linnaeus, 1758)	green iguana	PRE008900
<i>Isodictya setifera</i> Topsent 1901	red sponge	PRE009005
<i>Ithomia heraldica</i> Bates 1866	butterfly	NOC100034
<i>Junonia hedonia</i> (Linnaeus 1764) (syn. <i>Papilio hedonia</i> Linnaeus, 1764)	brown soldier butterfly	NOC000028
<i>Junonia hierta</i> Fabricius 1798	butterfly	NOC002421
<i>Junonia oenone</i> Fabricius 1764	butterfly	NOC002422
<i>Kallima paralekta</i> Horsfield 1829	butterfly	NOC002423
<i>Kallima sylvia</i> Cramer 1775	butterfly	NOC002424
<i>Kobus ellipsiprymnus</i> (Ogilby, 1833)	waterbuck	PRE008939 (also see NOC002511) NOC002500* (also see NOC100023*)
<i>Lamproptera curius</i> (Staudinger, 1889)	butterfly	NOC100061
<i>Lamproptera meges</i> (Zincken, 1831)	green dragontail butterfly	NOC000045
<i>Lamprotornis superbis</i> (Rueppell, 1845)	superb (glossy) starling	NOC002380
<i>Lasiodorides polycuspulatus</i> (Schmidt & Bischoff, 1997)	Peruvian blonde tarantula	PRE001049

<i>Lasiodorides striatus</i> (Schmidt & Antonelli, 1996)	Peruvian orange stripe tarantula	PRE001050
<i>Lasiiorhinus latifrons</i> (Owen, 1845)	southern hairy nosed wombat	NOC002552†
<i>Laternula elliptica</i> King & Broderip 1831	bivalve (mollusc)	PRE009006
<i>Latrunculia</i> (<i>Latrunculia</i>) <i>apicalis</i> Ridley & Dendy 1886	globe sponge	PRE009007
<i>Lemur catta</i>	ring tailed lemur	PRE008940 NOC100016*
<i>Lemur macao</i>	black lemur	PRE008941
<i>Leontopithecus rosalia</i>	golden lion tamarin	PRE008942
<i>Leopardus pardalis</i> Linnaeus, 1758 (syn. <i>Felis pardalis</i>)	ocelot	NOC002553†
<i>Leopardus wiedii</i> Schinz, 1821 (syn. <i>Felis wiedii</i>)	margay	NOC002554†
<i>Leptailurus serval</i> (Schreber, 1776) (syn. <i>Felis serval</i> Schreber, 1776)	serval	PRE008943 PRE008928
<i>Lexias pardalis</i> (Moore, 1878)	butterfly	NOC100062
<i>Limatula hodgsoni</i> Smith 1907	file shell (mollusc)	PRE009008
<i>Limenitis fessonia</i> Hewitson 1847	butterfly	NOC002425
<i>Limenitis iphicles</i> Hewitson 1847	butterfly	NOC002426
<i>Litoria caerulea</i> (White, 1790)	White's tree frog	PRE009037
<i>Loxodonta Africana</i>	African savannah elephant	PRE100033
<i>Loxodonta cyclotis</i>	African forest elephant	PRE100034
<i>Lycaon pictus</i>	African wild dog	PRE008944
<i>Lynx rufus</i> (Schreber, 1777) (syn. <i>Felis rufus</i>)	bobcat	PRE008945
<i>Macaca irus</i>	crab eating macaque	PRE008946
<i>Macaca mulatta</i>	Rhesus macaque	PRE008947
<i>Macaca nemestrina</i>	pig tailed macaque	PRE008948
<i>Macaca radiata</i>	bonnet macaque	PRE008949
<i>Macrobrachium rosenbergii</i>	unicorn prawn	PRE100017
<i>Macroptychaster accrescens</i> Koehler 1920	sea star	PRE009009
<i>Macropus fuliginosus</i> Desmarest, 1871	western grey kangaroo	NOC002555†
<i>Macropus giganteus</i> Shaw 1790	great grey kangaroo	PRE100018
<i>Macropus rufus</i> (Desmarest 1822)	red kangaroo	PRE100019
<i>Mandrillus sphinx</i> Linnaeus, 1758	mandrill	NOC002556†
<i>Mechanitis menapis saturata</i>	butterfly	NOC000058
<i>Mechanitis polymnia</i> Linnaeus 1758	butterfly	NOC100035
<i>Metamorpha epaphus</i> Latreille 1819	butterfly	NOC002427
<i>Monocaulus microrhiza</i> (Hickson & Gravely 1907) (previously <i>Lampra microrhiza</i>)	hydroid	PRE009010
<i>Monocaulus parvula</i> (Hickson & Gravely 1907) (previously <i>Lampra parvula</i>)	hydroid	PRE009011
<i>Moroteuthis knipovitchi</i> Filippova 1972	squid	PRE009012
<i>Morpho granadensis</i> Felder 1867	butterfly	NOC100026
<i>Morpho peleides</i> Kollar 1850	blue morpho butterfly	NOC000037
<i>Morpho polyphemus</i> Westwood 1850	white morpho butterfly	NOC000060
<i>Myscelia cyaniris</i> Doubleday 1848	cyan bluewing butterfly	NOC002428

<i>Myscelia ethusa</i> Boisduval 1836	Mexican bluewing butterfly	NOC002429
<i>Nacella concinna</i> Strebel 1908	limpet (mollusc)	PRE009013
<i>Nenertean-lineus corragatus</i>	ribbon worm	PRE100020
<i>Neobuccinum eatoni</i> Smith 1875	snail (mollusc)	PRE009014
<i>Neofelis nebulosa</i> Griffith, 1821	clouded leopard	NOC002557+
<i>Notocrinus virilis</i> Mortensen, 1917	feather star	PRE009015
<i>Odontaster validus</i> Koehler 1906	Red starfish	PRE009016
<i>Ophiacantha antarctica</i> (Lyman, 1879) sensu Mortensen 1936	brittle star	PRE009017
<i>Ophionotus victoriae</i> Bell 1902	brittle star	PRE009018
<i>Ophisaurus apodus</i> (syn. <i>Pseudopus apodus</i>)	scheltopusik/glass lizard	PRE100021
<i>Opsiphanes bogotanus</i> (Distant, 1875)	butterfly	NOC100064
<i>Opsiphanes cassina</i> Felder 1862	butterfly	NOC100025
<i>Opsiphanes tamarindi</i> (Felder, 1861)	butterfly	NOC100065
<i>Orchomene plebs</i> (Hurley, 1965)	amphipod (zooplankton)	PRE009019
<i>Ornithoptera aesacus</i> Ney 1903	butterfly	NOC002430
<i>Ornithoptera priamus</i> (Linnaeus, 1758) (syn. <i>Troides priamus</i>)	Cairns birdwing butterfly	NOC000029
<i>Oryx dammah</i> (Cretzschmar, 1826)	scimitar horned oryx	PRE008950 (also see NOC002511) NOC002501* (also see NOC100023*)
<i>Oryx gazella</i>	gemsbok/gemsbuck/oryx	PRE008951 (also see NOC002511)
<i>Otolemur crassicaudatus</i> É. Geoffroy Saint-Hilaire, 1812	brown greater galago/ greater bush baby	NOC002558+
<i>Otolemur garnettii</i> Ogilby, 1838	northern greater galago/ greater bush baby	NOC002559+
<i>Pachliopta annae</i> Felder 1861	butterfly	NOC002432
<i>Pachliopta aristolochiae</i> (Fabricius 1775) (<i>Pachliopta aristolochia</i>)	common rose swallowtail butterfly	NOC000038
<i>Pachliopta atropos</i> (Staudinger, 1888)	butterfly	NOC100066
<i>Pachliopta kotzebuea</i> Eschscholz 1821	velvet rose butterfly	NOC002433
<i>Pachliopta mariae</i> Semper 1878	butterfly	NOC002434
<i>Pachliopta neptunus</i> (Guerin-Meneville, 1840)	butterfly	NOC100063
<i>Pachliopta oreon</i> Doherty	butterfly	NOC002431
<i>Pachliopta polydorus</i> (Linnaeus, 1763)	red bodied swallowtail butterfly	NOC000083
<i>Pagetopsis macropterus</i> Boulenger 1907	ice fish (Chaenichthyids)	PRE009020
<i>Pagothenia borchgrevinki</i> (Boulenger 1902)	Antarctic ice fish	PRE000667
<i>Pamphobetus antinous</i> (Pocock, 1923)	steely blue-leg bird-eating spider	PRE001051
<i>Pamphobetus platytomma</i> (Mello-Leitao, 1923)	Brazilian pink tarantula	PRE001052
<i>Pan troglodytes</i>	chimpanzee	PRE008952
<i>Panacea procilla</i> (Hewitson, 1853)	butterfly	NOC100067

<i>Pangasius sutchi</i>	ghost shark	PRE100022
<i>Panthera leo</i>	African lion	PRE008953
<i>Panthera pardus</i>	leopard	PRE008955 NOC002383
<i>Panthera tigris</i>	tiger	PRE008957
<i>Papilio aegeus</i> Donovan, 1805	orchard swallowtail butterfly	NOC000062
<i>Papilio ambrax</i> Boisduval, 1832	ambrax swallowtail butterfly	NOC000022
<i>Papilio anchisiades</i> Esper 1788	ruby-spotted swallowtail butterfly	NOC000085
<i>Papilio androgeus</i> Cramer, [1775]	butterfly	NOC000064
<i>Papilio blumei</i> Boisduval, 1836	butterfly	NOC000065
<i>Papilio canopus</i> Westwood, 1842	butterfly	NOC000066
<i>Papilio daedalus</i> (Felder and Felder, 1861)	butterfly	NOC100068
<i>Papilio dardanus</i> (Brown, 1776)	African/mockers swallowtail butterfly	NOC000059
<i>Papilio demoleus</i> Linnaeus, 1758	common lime/chequered swallowtail butterfly	NOC000032
<i>Papilio dialis</i> (Leech, 1893)	southern Chinese peacock butterfly	NOC000067
<i>Papilio lorquinianus</i> Felder 1865	butterfly	NOC002435
<i>Papilio lowii</i> Druce, 1873	butterfly	NOC000068
<i>Papilio memnon</i> Linnaeus, 1758	great mormon butterfly	NOC000069
<i>Papilio oribazus</i> Boisduval 1836	butterfly	NOC002436
<i>Papilio palinurus</i> Fabricius 1781 aka <i>Papilio palinurus</i> (Fabricius, 1787)	butterfly	NOC100043
<i>Papilio paris</i> Linnaeus, 1758	Paris peacock butterfly	NOC000074
<i>Papilio peranthus</i> Fabricius 1787	butterfly	NOC002437
<i>Papilio polymnestor</i> Cramer, [1775]	blue mormon butterfly	NOC000071
<i>Papilio polytes</i> Linnaeus, 1758	common mormon butterfly	NOC000036
<i>Papilio rumanzovia</i> Eschscholtz, 1821	butterfly	NOC000072
<i>Papilio ulysses</i> Linnaeus, 1758	Ulysses butterfly	NOC000091
<i>Papio hamadryas</i>	baboon	PRE008958
<i>Paramoera walkeri</i> (Stebbing 1906)	amphipod (zooplankton)	PRE009021
<i>Parantica aspasia</i> (Fabricius, 1787)	butterfly	NOC100069
<i>Parathyma perius</i> Linnaeus 1757	butterfly	NOC002438
<i>Parborlasia corrugatus</i> (McIntosh, 1876)	nemertean (ribbon) worm	PRE009022
<i>Pareronia valeria</i> (Cramer, 1776)	butterfly	NOC100070
<i>Parides arcas</i> Cramer 1781	Arcas cattleheart butterfly	NOC002439
<i>Parides childrenae</i> (Gray, 1832)	butterfly	NOC100071
<i>Parides erithalion</i> Kollar 1850	variable cattleheart butterfly	NOC002440
<i>Parides iphidamas</i> Fabricius 1793	Transandean cattleheart butterfly	NOC002441
<i>Parides montezuma</i> Westwood 1842	Montezuma's cattleheart butterfly	NOC002442
<i>Parides neptunus</i> Guerin-Meneville 1840	butterfly	NOC002443

<i>Parides photinus</i> Doubleday 1844	pink-spotted cattleheart butterfly	NOC002444
<i>Parides semperi</i> Felder 1861	butterfly	NOC002445
<i>Parides sesostris</i> Cramer 1779	emerald-patched cattleheart butterfly	NOC002446
<i>Parides vertumnus</i> Cramer 1779	Vertumnus cattleheart butterfly	NOC002447
<i>Pecari tajacu</i> (syn. <i>Tayassu tajacu</i>)	collared peccary	PRE008960
<i>Pelecanus conspicillatus</i>	Australian pelican	PRE100023
<i>Perconaster fuscus antarctica</i>	sea star	PRE009023
<i>Percontaster fuscus antarctica</i>	yellow starfish	PRE100024
<i>Phascolarctos cinereus</i> Goldfuss, 1817	koala	NOC002560+
<i>Phelsuma madagascariensis</i>	Madagascar giant day gecko	PRE009032
<i>Philaethria dido</i> Linnaeus 1763	green longwing butterfly	NOC000086
<i>Philomedes heptathrix</i> Kornicker, 1975	ostracod (zooplankton)	PRE009024
<i>Phoenicopterus roseus</i> (<i>Phoenicopterus ruber roseus</i> (Pallas, 1811))	greater flamingo	PRE100025 NOC100021*
<i>Polyura schreiber</i> (Godart, 1824)	butterfly	NOC100072
<i>Pongo abelii</i>	Sumatran orangutan	
<i>Pongo pygmaeus</i>	Bornean orangutan	PRE008961
<i>Potamilla antarctica</i> (Kinberg, 1866)	tube worm	PRE009025
<i>Potorous tridactylus</i> Kerr, 1792	long nosed potoroo	NOC002561+
<i>Precis almanac</i> (syn. <i>Junonia almana</i> (Linnaeus, 1758))	peacock pansy butterfly	NOC000077
<i>Precis atlites</i> (syn. <i>Junonia atlites</i> Linnaeus 1763)	grey pansy butterfly	NOC000078
<i>Precis lemonias</i> (syn. <i>Junonia lemonias</i> (Linnaeus, 1758))	lemon pansy butterfly	NOC000079
<i>Precis orythia</i>	blue African butterfly	NOC000080
<i>Prepona omphale</i> Hubner 1819	butterfly	NOC002448
<i>Prionailurus bengalensis</i> (syn. <i>Felis bengalensis</i>)	leopard cat	PRE008962
<i>Prionailurus viverrinus</i> Bennet 1833	fishing cat	NOC002486
<i>Pteropus poliocephalus</i>	grey headed flying fox	PRE008963
<i>Pteropus scapulatus</i>	little red flying fox	PRE008964
<i>Puma concolor</i> (Linnaeus 1771) (formerly <i>Felis concolor</i>)	puma	PRE008901
<i>Pygocentrus nattereri</i>	red bellied piranha	PRE100026
<i>Rhea americana</i>	greater rhea	PRE100027
<i>Rossella nuda</i> Topsent 1901	volcano sponge	PRE009026
<i>Saguinus imperator</i> (Goeldi, 1907)	emperor tamarin	NOC002482
<i>Saguinus oedipus</i> (Linnaeus, 1758)	cotton top tamarin	PRE008965 NOC100018*
<i>Saimiri boliviensis</i> I. Geoffroy Saint-Hilaire and Blainville, 1834	Bolivian squirrel monkey	NOC002562+
<i>Saimiri sciureus</i> (Linnaeus, 1758)	common squirrel monkey	PRE009036
<i>Salamis parrhassus</i> Drury 1782	butterfly	NOC002449
<i>Samia luzonica</i> (Watson, 1913)	butterfly	NOC100073
<i>Sarcophilus harrisi</i> Boitard, 1841	Tasmanian devil	NOC002563+

<i>Siderone nemesis</i> Cramer 1777	butterfly	NOC002450
<i>Solmundella bitentaculata</i> Quoy and Gaimard, 1833	jellyfish	PRE009027
<i>Sterechinus antarcticus</i> Koehler, 1901	sea urchin (echinoids)	PRE009028
<i>Sterechinus neumayeri</i> (Meissner, 1900)	sea urchin (echinoids)	PRE009029
<i>Suricata suricatta</i> (Schreber, 1776)	meerkat	PRE008966 NOC100020*
<i>Synaceia verrucosa</i>	stone fish	PRE100028
<i>Tachyglossus aculeatus</i> Shaw, 1792	short beaked echidna	NOC002564†
<i>Tapirus terrestris</i> (Linnaeus, 1758)	South American tapir	PRE008967 NOC100022*
<i>Theraphosa blondi</i> (Latreille, 1804)	Goliath bird-eating spider	PRE001053
<i>Tithorea tarricina</i> Hewitson 1857	butterfly	NOC100036
<i>Tonna cervisina</i>	snail cask	PRE100030
<i>Trachydosaurus rugosus</i> (syn. <i>Tiliqua rugosa</i>)	shingleback skink	PRE009034
<i>Trachypithecus francoisi</i> Pousargues, 1898	Francois leaf-monkey	NOC002565†
<i>Tragelaphus eurycerus</i> (Ogilby 1837)	bongo	NOC002502* (also see NOC100023*)
<i>Tragelaphus spekii</i> (Sclater 1863)	sitatunga (superseded by approval NOC002511)	PRE008968 (also see NOC002511) NOC002503* (also see NOC100023*)
<i>Tragulus javanicus</i> (Osbeck, 1765)	lesser chevrotain	NOC002566†
<i>Trematomus bernacchii</i> (Boulenger 1902) (syn. <i>Pagothenia bernacchii</i> ; <i>Pseudotrematomus bernacchii</i>)	Antarctic cod (fish)	PRE000668
<i>Trematomus centronotus</i> (Regan 1914) (syn. <i>Trematomus pennelii</i> ; <i>Pseudotrematomus pennelii</i>)	Antarctic cod (fish)	PRE000670
<i>Trematomus hansonii</i> (Boulenger 1902) (syn. <i>Pagothenia hansonii</i> ; <i>Pseudotrematomus hansonii</i>)	Antarctic cod (fish)	PRE000669
<i>Trematomus newnsi</i> (Boulenger 1902)	Antarctic fish	PRE000674
<i>Trematomus nicolai</i> (Boulenger 1902) (syn. <i>Pseudotrematomus nicolai</i>)	Antarctic fish	PRE000673
<i>Trogonoptera trojanus</i> Staudinger 1889	butterfly	NOC002451
<i>Troides brookiana</i> (syn. <i>Trogonoptera brookiana</i> (Wallace, 1855))	Rajah Brooke's birdwing butterfly	NOC000082
<i>Troides helena</i> (oblongomaculatus)	common birdwing butterfly	NOC000089
<i>Troides magellanus</i> (Felder, 1862)	butterfly	NOC100074
<i>Troides plateni</i> (Staudinger, 1888)	butterfly	NOC100075
<i>Troides rhadamantus</i> (Lucas, 1835)	butterfly	NOC000090
<i>Trophon longstaffi</i> Smith, 1907	snail (mollusc)	PRE009030
<i>Uncia uncia</i> Schreber, 1775	snow leopard	NOC002567†
<i>Urania leilus</i> Linnaeus 1759	moth	NOC002452
<i>Urania sloanus</i> Cramer 1779	moth	NOC002453
<i>Ursus arctos</i> Linnaeus, 1758	brown bear	NOC002568†
<i>Urticinopsis antarctica</i> Verrill 1922	sea anemone	PRE009031
<i>Varanus gouldii</i>	Goulds monitor	PRE100031

<i>Varanus varius</i>	lace monitor	PRE009035
<i>Varecia variegata</i>	ruffed lemur	PRE008969 NOC100017*
<i>Vindula arsinoe</i> Cramer 1779	the cruiser butterfly	NOC000039
<i>Vindula deione</i> Erichson 1834	butterfly	NOC100041
<i>Vindula erota</i> Fabricius 1793	butterfly	NOC100042
<i>Vombatus ursinus</i> Shaw 1800	common wombat	PRE001035
<i>Xenopus laevis</i>	African clawed toad	PRE100032
<i>Yoma sabina</i> Cramer 1782 (syn. <i>Papilio sabina</i> Cramer, 1780)	lurcher butterfly	NOC000057