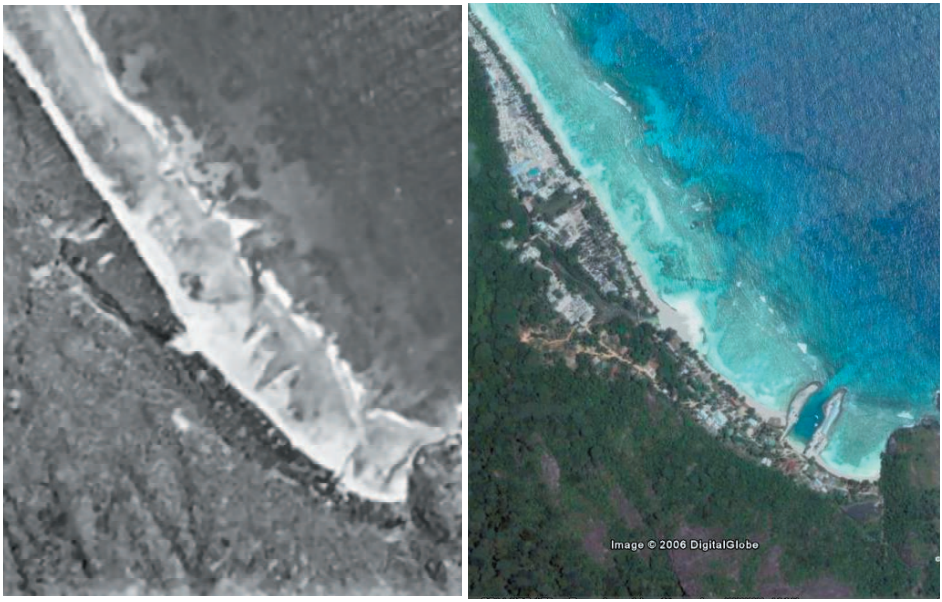
Development on Silhouette

Harbour construction

Since the 19th century access to most of Silhouette was via the narrow pass through the reef at La Passe and the settlement's jetty (Fig. 16a). In 2000 the pass was widened and deepened, and a harbour excavated (Fig. 16b). The impacts on the natural environment were considerable in the short term, resulting in the death of thousands of reef-flat animals (most obviously molluscs, brittle stars and sea cucumbers – Fig. 17). In 2005 the channel was cleared from coral regrowth by blasting, this caused some fish mortality at the time (Fig. 17).

Fig. 16 La Passe sea access.

a) La Passe in 1960 b) in 2006



c) view of harbour in 2006

The harbour improved access to the island, enabling larger vessels to reach the shore. This also increased vulnerability of the island to new human impacts. In September 2005 an oil spill occurred in the harbour when a boat carrying waste oil from North Island to Mahé developed a leak and made an emergency stop in the Silhouette harbour (Gerlach 2005). The vessel was beached on Silhouette on 7th September and patched. It was refloated on 10th September but the repairs were not successful. It sank in the harbour in the night of 11th September. Oil was observed leaking from the wreck (Fig. 18), although this was reported to IDC and the vessel's owners no action was taken. The Ministry of Environment sent a clean-up team but this did not arrive until after the floating oil had been flushed out of the harbour by a falling tide. No further oil was observed and it is thought that the currents moved the oil to the outer reef and

Fig. 17. Harbour construction.
a) dead marine invertebrates

b) selection of holothurians, sipunculans and polychaetes

c) dead fish

into open water. This incident highlighted a need for oil spill contingency measures, particularly with the presence of a heavily used harbour.

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Hotel development from 2005

In 2005 the Silhouette Island Lodge hotel was closed down and development started on the LaBriz Resort. The replacement of the 12 room Lodge with a 110 room Resort required a significant increase in the area occupied by the tourism development (Fig. 19) and an increase in infrastructure. An increase in electricity generation capacity, installation of a desalination plant, a water treatment system, incinerator and vehicles has considerably increased the carbon footprint of the island, and necessitated the construction of a large fuel store. This improved amenities for the island residents but also increases dependence on imported diesel and the risk of accident; in January 2011 a fuel leak from the generators resulted in diesel pollution of the marsh.

Construction of the new hotel in 2005-6 was undertaken by 1,000 labourers imported from several Asian countries. The rapid temporary expansion of the population of the island brought with it inevitable strains on systems. The most dramatic of these was the 2006 typhoid outbreak which had a serous impact on tourism. A major issue was waste disposal, particularly food waste. This was dumped in pits dug in the forest

Fig. 18. a) Barge sunk in La Passe harbour, b) oil along the harbour walls

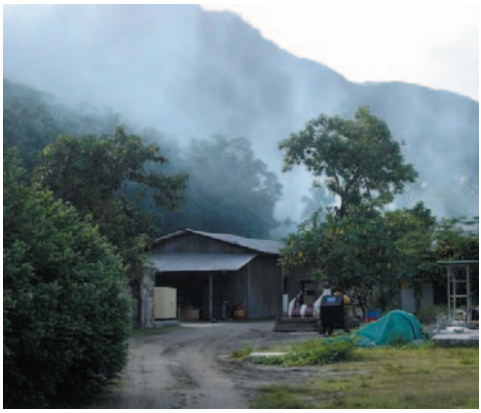
and over the two years of construction approximately 420,000 litres of food waste were dumped (Fig. 20). Seepage from the dumping pits resulted in eutrophication of the Dauban marsh in 2006, resulting in algal blooms in the marsh and deposition of algae onto the reef flat.

The great expansion in the frequency of supply boats to the island, bringing construction materials increased the risk of introduction of invasive species. Although no invasive species protocols were implemented the only invasive species brought onto the island in this way was the house gecko *Hemidactylus frenatus*. This was first recorded on Silhouette on 15th December 2008, by December 2009 it was abundant throughout La Passe. It remains a matter of concern that there are no measures in place that would prevent invasion by more significant invaders currently absent from the island, such as brown rats *Rattus norvegicus* and crazy ants *Anoplolepis gracilipes*.

Fig. 19 Labriz construction

Fig. 20 Food dumping

Fig. 21 Fogging



During landscaping of the hotel gardens NPTS, IDC, MENR and Lariz agreed that no plants would be imported to the island, all planting being carried out with material propagated from plants already growing (either native or ornamental). This has prevented the import of new botanical invasives. NPTS provided advice to Labriz on planting and locating suitable plants and this formed part of cooperation between NPTS and Labriz. In return for advice on environmental matters Labriz assisted NPTS through funding of bat monitoring, allocation of labour for forest restoration and provision of transport. This enabled NPTS to maintain and expand conservation activity from 2007. An important aspect of this cooperation was an agreed control on the extent of pesticide fogging. This was carried out from 2006 to control mosquitoes in the hotel and settlement. Initial use was extensive and pesticide fog was observed drifting into the bat roost (Fig. 21). After this incident it was agreed that pesticide use would be kept away from the area of concern. This has been maintained although it has needed periodic enforcement. NPTS undertook a survey of mosquito distribution and ecology in 2006. This determined that the problematic species for human amenity and health (principally *Aedes albopictus* and *Culex fatigans*) were mainly breeding in rubbish (discarded bottles, tins and in coconuts opened for drinking). It was recommended that a major improvement in waste disposal and removal could reduce the need for mosquito control. Waste disposal remains a major issue on Silhouette. Historically waste was buried on the plateau; the installation of an incinerator in 2006 should have removed the need for waste dumping on the island. However, this method of disposal continues with the dumping of garden and plastic waste in the forest (Fig. 22). The transfer of management of Labriz to Hilton Hotels has resulted in refurbishment and alterations in provisioning. This has seen a major increase in packaging waste which is mostly shipped to Mahé.

A second tourism establishment at La Passe was constructed between 2006 and 2009, this development led to removal of beach crest vegetation, mining of beach sand for construction and the excavation of a soil quarry in the forest. In addition one of the islands three *Hernandia nymphaeifolia* trees was destroyed despite requests to the contractors to protect this plant.

Fig. 22 Waste disposal in the forest

La Passe – Grande Barbe road

In 2006 a second major hotel development was proposed for Silhouette. Planning permission was granted for the construction of a hotel at Grande Barbe but this required a new means of transporting construction material to this isolated site. Accordingly the construction of a road across Silhouette was proposed. This proposal was initially rejected by the Seychelles government on the basis of its cost and probable impacts. The developers and IDC lobbied intensively in favour of the road and the government were persuaded to review their decision. IDC commissioned the Islands Conservation Society to undertake a Scoping Report (Betts 2007) and the subsequent Environmental Impact Assessment (Barbé 2008). The consultant preparing the EIA commissioned NPTS to contribute a Biodiversity Impact Assessment for his report. This section specified the issues that needed to be addressed and the large number of mitigation measures that would be required. NPTS further objected to the road in an Environmental Impact Assessment for the proposed Silhouette National Park, see below (Gerlach & Gerlach 2008). In 2009 the government definitively rejected the plan. Following this decision the developers withdrew their interest in Grande Barbe. The non-biodegradable tape laid out to mark the route (Fig. 23) was abandoned; NPTS has removed most of this but some sections remain in place.

Protected Areas

In the early 20th century the southern parts of Silhouette were effectively protected as a 'reserve' (Scott 1910) in reality the primary reason for the existence of this protected area was the almost complete inaccessibility of the area. This remains a pristine area; the only primary lowland forest in the islands.

In 1970 Swabey proposed three reserve areas on Silhouette, covering the northern and southern rocky slopes and the mountain forest habitats. Although the main areas

Fig. 23. The proposed La Passe – Grande Barbe road. a) proposed route, b) route marker tape left in the forest

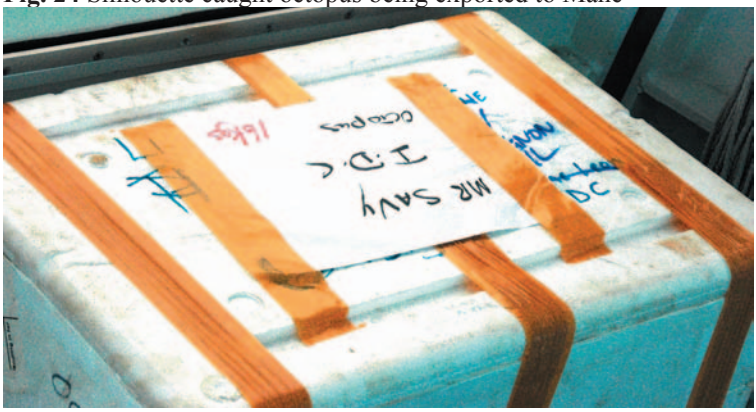
on Mahé identified by Swabey for protection were formed into the Morne Seychellois National Park in 1979 no protection was provided for the Silhouette areas for a further 40 years.

The Silhouette Marine National Park was designated in October 1987. This affords nominal protection to the marine environment to a distance of 1 km from shore, an area of 2,000 hectares. Activities within the Silhouette Marine National Park are regulated by the National Parks (Silhouette Marine) (Designation) Order, 1987. Within this zone only fishing for local consumption is permitted in theory. There has never been any enforcement of the National Park and exploitation is unregulated; most exploitation is for local consumption in accordance with regulations, however, some octopus harvesting is carried out for export to Mahé (Fig. 24). In addition to this exploitation there has been some poaching. Fishing boats from Mahé regularly use the deep waters around Silhouette and some poaching of sea cucumbers, marine shells and octopus from the reef flats has occurred, most frequently in August 1998 – February 1999.

In 1999 NPTS and the Forestry Department compiled a World Bank Global Environment Facility (GEF) proposal entitled 'Forest Conservation on Silhouette'. This aimed to restore Silhouette's forests to a more natural state and to obtain some form of protection for the island. The project was approved by IDC at the end of 1999 and submitted to the Ministry of Foreign Affairs for submission to the GEF. In 2000 staff members of the International Union for the Conservation of Nature and World Bank visited Silhouette to discuss the project with NPTS in preparation for the submission to GEF. Their discussions with the Ministry of Environment led to the proposal being completely restructured in 2001. The final submitted project removed the protection of Silhouette and the practical conservation action, replacing these with general projects on data gathering and management across the islands.

Since its founding in 1992, NPTS has been advocating the protection of the terrestrial environment on Silhouette. In 2002 it was suggested that the island should be designated a biosphere reserve (M. Batisse in litt. 26.iii.2002 & 15.iv.2002). This was proposed to IDC but was rejected as being too restrictive on IDC's management.

Fig. 24 Silhouette caught octopus being exported to Mahé



However, on 29th September 2007 the President of Seychelles announced that most of the island would be made a National Park. Following agreement with the Ministry of Environment (D. Matatiken in litt. 17.vii.2008) NPTS carried out an Environmental Impact Assessment for the proposed park. Park boundaries were proposed in 2009, covering 90% of the island but excluding the coastal plateaux. A notable omission was an area of habitat used by the sheath-tailed bat population for foraging. NPTS lobbied for inclusion of this area and was supported by international conservation organisations. The expansion of the boundaries to include this area was agreed (J. Morgan in litt. 1.vi.2009) and the Silhouette National Park finally designated in August 2010.

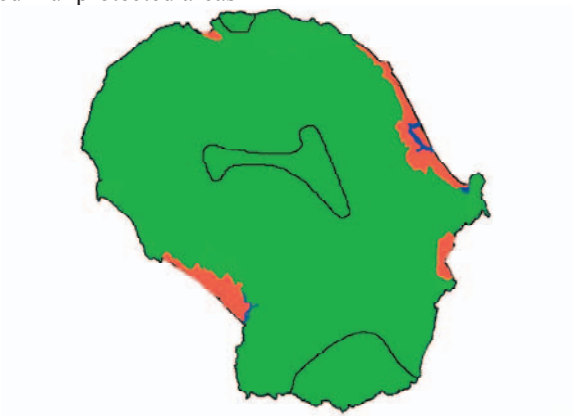
Although the Silhouette National Park has been designated no park regulations have been published.

Discussion

The 14 years of research and active conservation on Silhouette has enabled NPTS to identify five major concerns for ecosystem conservation: invasive species, fragmented populations, climate change, development (including exploitation) and continuity. These are general issues for conservation globally, they are probably particularly intense on small islands.

Invasive species and fragmented populations are well established as major conservation issues. On Silhouette NPTS was researching management techniques for both invasive and threatened species and in 2009 started establishing larger scale monitoring programmes. With the collaboration of Labriz it was anticipated that the scale of habitat management would expand significantly from 2011. Critically endangered populations were also the subject of intensive research and management, especially for the sheath-tailed bat (Gerlach 2011).

Fig. 25 Silhouette National Park boundaries, showing areas proposed by Swabey (1970), MENR in 2008 and the final area. Black lines – approximate areas defined by Swabey; dark green – Silhouette National Park; light green – non-reaserve areas proposed in 2008 but included in National Park in 2010; blue – marsh areas; red – unprotected areas



Climate change is probably the most significant issue for conservation in all countries. Even on high islands with relatively stable climates such as Seychelles the threats are severe (Gerlach 2008g) and several species extinctions in the islands have already been attributed to climate change (Gerlach 2007, 2010). On Silhouette there is evidence of ongoing declines in the sooglossid frog populations due to changes in rainfall regimes (Gerlach submitted) and the probable extinction of the snail *Glabrennea seychellensis* (Gerlach in prep). The most significant changes on Silhouette attributed to climate change to date have been related to changes in seasonality of rainfall. Whilst this may directly affect habitat suitability for some species its impacts on the structural integrity of habitats may be more severe. Longer dryer periods and more intense rainfall events are likely to destabilise steep slopes, leading to increasing frequency of landslides. In January 2005 a major landslide from Mon Plaisir to Jardin Marron (Fig. 26) destroyed 1.4 hectares of forest and killed two coco-de-mer trees. This area has since been covered by invasive *Paraserianthes falcataria* and *Clidemia hirta*. This demonstrates the synergistic nature of invasion biology and climate change.

Sea level rise is also notable, with a measurable increase in Seychelles and on Silhouette this has resulted in destabilisation of the reef flat system (Gerlach 2010). In addition the rising sea level results in marine inundation of the Dauban marsh area with increasing frequency. Before 2005 this was a rarely observed event and the marsh was largely freshwater (as indicated by the extensive growth of salt intolerant grasses – Fig. 27). Since 2005 the marsh has been mainly brackish to salt, grass cover has been lost and salt associated mangrove ferns *Achrostichum aureum* have spread. Although this marsh is small it is of ecological significance as protection of the site by the constant presence

Fig. 26 Land slide at Jardin Marron

Fig. 27 Dauban marsh changes

1998

2007

2009

of the NPTS headquarters adjacent to the marsh allowed night herons *Nycticorax nycticorax* to start breeding in 1998 (first fledgling recorded in May 1998) and grey herons *Ardea cinerea* in 2010 (15 years after their arrival on the island). These changes demonstrate the significance and complexity of climate change. In order to manage this issue in the future there is a need for intensive research and for management of habitats to ensure that they are as adaptable as possible. NPTS established a major programme of climate change research in 2009 which was intended to be a long-term programme.

Development has been an increasingly significant issue in Seychelles in the 21st century. On Silhouette development has been restricted to coastal areas. The proposal of a road across the island would have changed that, but with its rejection and the declaration of the National Park inland development should not occur. Coastal development has not been without problems, due to strain on infrastructure, waste disposal and use of beach sand in construction. These issues are mostly covered by planning and building regulations, but these have been very poorly enforced to date. An additional problem with development has been exploitation of natural resources. Exploitation has been observed for turtles, octopus, fish, fruit-bats, shearwaters, fruit and medicinal plants. As discussed above poaching is an issue for turtles, octopus and fish. No studies of the impact of local consumption of octopus and fish have been made, but anecdotal evidence indicates no major change in harvest levels since 1997. Fruit-bats *Pteropus seychellensis* have only been consumed at very low levels on Silhouette although their inclusion on the menu of one of the hotel restaurants raises the possibility of an increase in demand and exploitation. Medicinal plant use is also low level, although there is concern that *Impatiens gordonii* may not be being exploited sustainably (Gerlach submitted). Fruit exploitation largely uses introduced species, the only exception being coco-de-mer which is not harvested sustainably. The jak fruit *Artocarpus heterophyllus* was traditionally used and harvested from the forest, the increase in the human population on the island has meant that island residents are no longer able to find jak fruit in accessible areas. Of more concern is the exploitation of shearwaters, the remains of 25 of these were found in 2006, having been killed and the meat cut off. This population is also being affected by cat predation (remains found in 2010). The size of this population is not known and its resilience to the new exploitation by humans may be questionable. There are also low level human impacts on species which would be a cause for concern if they increase in frequency. An example of this is the traditional practice of killing snakes on sight. The Seychelles house snake *Lamprophis geometricus* is very rarely

Table 3. Expenditure by NPTS on the Silhouette Conservation Project ($)

Information centre	Construction	29,000
	Office & laboratory equipment	15,120
	Consumables	2,000
	Communications	5,000
Time and tansport		106,830
Research	Field equipment	43,000
	Labour	57,330
Total		251,280

encountered and the killing of two individuals during path clearing in 2004 was a point of concern. All of these exploitation issues need increased monitoring and effective intervention. Theoretically this should be possible with Silhouette having National Park status.

Continuity is clearly an essential requirement for effective conservation. NPTS was established on the island in 1997 and was able to achieve a considerable amount: determining conservation needs, initiating habitat restoration, establishment of a new population of *Impatiens gordonii* and expansion of the sheath-tailed bat population. In addition NPTS contributed to the protection of the island from the proposed road, the designation of the island as a protected area and the expansion of that protection to cover all sheath-tailed bat habitat. Despite these achievements and significant investment in the conservation of Silhouette (Table 3) NPTS has not been able to ensure conservation continuity.

In 2008 IDC established the Silhouette Island Foundation to regulate conservation on the island and to raise funds for its associated Islands Conservation Society to undertake activities on the island. Labriz was requested to fund the Foundation through a conservation levy but refused due to their existing large investment in the island's infrastructure. As a result of this financial inviability the Foundation has been inactive. Since 2008 NPTS has provided IDC and ICS with an annual work plan to allow coordination of any new activities with ICS. However, the requested reciprocal plan from ICS was never prepared and ICS has no intention of undertaking conservation action on Silhouette (A. Skerrett pers. comm.).

In December 2010 IDC served notice to NPTS that it was being evicted from the island. No justification for this precipitate action was given and despite appeals to the Ministry of Environment, no support was given. At the end of March 2011 NPTS was forced to leave its accommodation and office at La Passe. NPTS was permitted to use the Information Centre it had funded and constructed, until the end of May 2011. From this time there was no active conservation on Silhouette. In addition to the abandonment of active conservation there is also no longer any conservation oversight on the island. This means that there will be no reporting of any conservation issues in the future. There are serious points of concern at this time, such as the continued dumping of rubbish in the forest. Although this should have ceased in 2010 as the dump site is within the National Park the frequency of dumping has actually doubled in 2011 and the volume of material dumped also increased.

An 'Environmental and Social Action Plan' funding plan was prepared for Labriz ('Silhouette Island Resorts Ltd.') in March 2010 (IFC 2010). This required the improvement of environmental and management systems to international standards and a number of conservation actions. The latter comprised establishing baseline population estimates and monitoring for Critically Endangered animals (sheath-tailed bat, hawksbill turtle and terrapins), implementing a biodiversity offset for the hawksbill turtle (monitoring at Grande Barbe), reduction in insecticide fogging, improve conditions for the sheath-tailed bat and provision of assistance to NPTS in habitat management. In addition the establishment of a Scientific Committee was required to "determine the nature of marine baseline study required with respect to the current turtle nesting activity

on Anse La Passe beach and any other sensitive marine resources". NPTS and Labriz collaborated in starting these measures in 2010 but with the eviction of NPTS from Silhouette these requirements can no longer be met. Thus the removal of conservation management from Silhouette eliminates conservation oversight in the national park and jeopardises the financial future of the tourism infrastructure.

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Appendix I. List of marine fish and molluscs recorded within the Silhouette Marine National Park

FISH

Acanthuridae: *Acanthurus leucosternon, A. lineatus, A. triostegus* , *A. xanthopetus, Ctenochaetus striatus, Naso unicornis, Paracanthurus hepatus, Zebrasoma flavescens*

Albulidae: *Albula vulpes*

Antennariidae: *Histrio histrio*

Apogonidae: *Apogon coccineus, A. cooki, A. nigripennis*, *A. savayensis, Cheilodipterus*

artus, Nectamia savayensis

Atherinidae: *Atherinomorus lacunosus* (record in Kimura *et al*. 2007)

Aulostomidae: *Aulostomus chinensis*

Balistidae: *Odonus niger, Rhinecanthus aculeatus*

Blennidae: *Alticus anjouanae, A. kirkii, A. monochrus, Aspidonotus taeniatus*, Istiblennius *andamensis,* I. dussumieri*, I. edentulus*, *I. impudens*, *Petroscirtes mitratus*, *Plagiotremus phenax, Salarias fasciatus*

Atherinidae: *Atherinomorus lacunosus*

Bothidae: *Bothus pantherinus*

Caesionidae: *Casio teres*, *Pterocaesio tile*

Carangidae: *Selar crumenophthalmus*

Carcharhinidae: *Triaenodon obesus*

Centriscidae: *Aeoliscus strigatus*

Chaetodontidae: *Chaetodon auriga*, C. *guttatissimus*, *C. lunula, C. melannotus, C. meyeri*, *C. triangulum*, *C. trifasciatus, C. vagabundus,C. zanzibarensis, Forcipiger flavissimus, Heniochus acuminatus, H. monoceros*

Chanidae: *Chanos chanos*

Cirrhitidae: *Paracirrhites forsteri*

Coryphaenidae: *Coryphaena hippurus*

Cynoglossidae: *Cynoglossus lachneri*

Dasyatidae: *Dasyatis kuhlii, Himantura granulata,Pastinachus sephen, Taeninura melanospilos, Urogymnus asperrimus*

Diodontidae: *Diodon liturosus*

Echeneidae: *Echeneis naucrates*

Eleotridae: *Ophiocara porocephala*

Exocoetidae: *Cheilopogon naresii*

Fistulariidae: *Fistularia petimba*

Ginglymostomatidae: *Nebrius ferrugineus*

Gobiidae: *Asterropteryx gubbina, A. semipunctata*, *Bathygobius cyclopterus*, *B. laddi*, *Drombus key, Eviota prasina, Favoigobius reichei, Fusigobius neophytus, Gnatholepis cauerensis, Istigobius ornatus, Periphthalmus kalolo, Psammogobius knysnaensis*, *Redigobius bikolanus*, *Silhouettea insinuans*, *Valenciennea sexguttata*

Haemulidae: *Diagramma pictum, Plectorhinchus albovittatus, P. gaterinus, P. orientalis, P. schotaf*

Holocentridae: *Myripristis adusta, M. seychellensis*, *Sargocentron seychellense*

Kraemeriidae: *Kraemeria samoensis*

Labridae: *Bodianus diana, Cheilio inermis, Cheilinus trilobatus*, *C. undulates*, *Cheilio inermis, Coris formosa*, *Cymolutes praetextatus, Epibulus caeruleus*, *Fowleria aurita, Gomphosus caeruleus*, *Halichoeres iridis, H. nebulosus, H. marginatus, Hologymnosus annulatus, Iniistius pavo, Labroides dimidiatus, Labropsis xanthonota*, *Novaculichthys macrolepidotus, N. taeniourus, Pavoclinus mentalis, Oxycheilinus arenatus, Stethojulis albovittata, S. strigiventer, Thalassoma hebraicum, Wetmorella nigropinnata, Xyrichtys pentadactylus*

Lethrinidae: *Lethrinus harak*
Lutjanidae: *Lutjanus fulviflamma, L. lujanus, L. sebae*
Monacanthidae: *Cantherhines dumerilli*, *C. pardalis, Monodactylus argenteus, Paraluteres prionurus, Paramonacanthus barnardi*
Mullidae: *Parupeneus forsskali, P. indicus, P. macronemus*
Muraenidae: *Echidna nebulosa, Gymnomuraena zebra, Gymnothorax flavimarginatus, G. griseus, G. richardsoni, G. undulatus*, *Siderea grisea*
Myilobatidae: *Manta birostris*
Nemipteridae: *Scolopsis frenatus*
Ophichtidae: *Leiuranus semicinctus, Myrichthys maculosus*
Ostraciidae: *Lactoria cornuta, Ostracion cubicus, O. meleagris, O. nasus*
Paralichthyidae: *Pseudorhombus arsius*
Pempheridae: *Pempheris schwenkii*
Plesiopidae: *Plesiops coeruleolineatus*
Plotosidae: *Plotosus lineatus*
Pomacanthidae: *Apolemichthys trimaculatus, Pomacanthus imperator, P. semicirculatus, Pygoplites diacanthus*
Pomacentridae: *Abudefduf sexfasciatus, A. vaigiensis, Centropyge bispinosus, C. multispinis, Chromis dimidiata, C. ternatensis*, *Chrysiptera biocellata, C. glauca, C. unimacultata, Dasyllus aruaunus, D. trimaculatus, Plectorglyphidodon lacrymatus*, *Pomacentrus caeruleus, P. sulfureus, P. trilineatus, P. tripunctatus*
Priacanthidae: *Priacanthus blochi*
Ptereleotridae: *Nemateleotris magnifica, Ptereleotris microlepis*
Scaridae: *Bolbometopon muricatumm Chlorurus strongylocephalus, Scarus falcipinnis, S. prasiognathos, S. scaber*
Scombridae: *Rastrelliger kanagurta*
Scorpaenidae: *Parascorpaena aurita, Pterois antennata, P. miles, P. radiata, Scorpaenodes parvipinnis, Scorpaenopsis diabolus, Taenianotus triacanthus*
Serranidae: *Cephalopholis argus, C. aurnatia, Epinephelus coeruleopunctatus, E. melanostigma, Grammistes sexlineatus, Nemanthias carbberryi, Plectropomus laevis, Pseudanthias squamipinnis*
Siganidae: *Siganus argenteus, S. corallinus*
Sphyraenidae: *Sphyraena jello*
Sphyrnidae: *Sphyrna lewini*
Sygnathidae: *Corythoichthys haematopterus, Doryrhamphus excisus, Festucaelx erythaeus, Solenostomus cyanopterus*
Synodontidae: *Synodus variegatus*
Terapontidae: *Terapon jaruba*
Tetradontidae: *Arothron stellatus*, *Canthigaster margaritata, C. solandri, C. valentini*
Zanclidae: *Zanclus cornutus*

MOLLUSCS
Gastropoda, Bivalvia and Cephalopoda: See Gerlach & Gerlach 2004

Prosobranchia:
Anaspidea
Aplysiidae: *Aplysia dactylomela* Rang, 1828, *A. parvula* Guilding in Morch, 1863, *Dolabella auriculata* (Lightfoot, 1786)
Notaspidea
Pleurobranchidae: *Berthellina citrina* (Ruppell & Leuckart, 1828), *B. martensi* (Pilsbry, 1896) *Pleurobranchus mamillatus* Quoy & Gaimard, 1832
Pleurobranchidae: *Pleurobranchus peroni* Cuvier, 1804
Nudibranchia
Actinocyclidae: *Hallaxa indecora* (Bergh, 1905)
Dendrodoridae: *Dendrodoris carbunculosa* (Kelaart, 1858), *D. fumata* (Ruppell & Leuckart, 1831), *D. nigra* (Stimpson, 1855)
Doridae: *Asteronotus cespitosus* (van Hasselt, 1824), *Platydoris striata* (Kelaart, 1858)
Scyllaeidae: *Crosslandia viridis* Eliot, 1903
Sarcoglossa
Elysiidae: *Elysiella pusillaBergh*, 1872
Discocoridae: *Discodoris* cf. *mauritiana* (Berg, 1889)