Seabird News

Seychelles Seabird Group Newsletter

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Produced by Nature Seychelles for the SSG

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Finally – the long awaited issue of Seabird News is out. Funny how time runs away with us in Paradise! All the tourist magazines and websites speak of the slow and leisurely pace of life in Seychelles, where it is so relaxing that people hardly get beyond crawling mode. Perhaps it is so for visitors, but those of us working in conservation have so much to do that we haven't got time to notice the lackadaisical pace of life here!

We are lucky at the Nature Seychelles office at Roche Caiman to have the regular company of around half a dozen Frigatebirds (both Lesser and Great). They are a daily sight out of my office window at Roche Caiman. The area is also a regular hangout for a similar number of Common Terns. I have seen the Common Terns hanging out at Angelfish yacht charter and the Roche Caiman fish market every time I pass along the highway for the last several months.

It seems that Lesser Noddies' nest building and breeding season is off to a much slower than usual start this year. I was on Cousin in late May and normally at this time most Lesser Noddies are in full swing building their nests, however there seemed to be fewer than usual Noddies around and much less nest building than I expected to see. Let's see if it is just a slow start and things build up to their usual pace or whether it bodes badly for the season. Roseate Tern researcher David Monticelli also commented that the Roseate Terns on Aride seemed to be late to start nesting and are nesting in lower numbers than expected, so perhaps it will be a poorer than average breeding season for seabirds.

Rachel Bristol –SSG coordinator

SSG's role

Our main role is to work **collaboratively** to:

- Gain national perspective
- Prioritise seabird research and monitoring on a national level
- Coordinate all seabird research and monitoring
- Utilise standardised methods to ensure the comparability of data
- Ensure priority seabird work is undertaken
- Use information collected to direct future research and/or management

SSG partners lending a hand...

Throughout this newsletter there are examples of members lending a hand to each other when and where needed. Frankie Hobro of Aride Island and Rahel Winiger, a volunteer at Nature Seychelles, spent a week on Frégate Island conducting a census of the seabird populations there (see page 3 for full article). Rachel Bristol from Nature Seychelles and Unels Bristol teamed up with Bird Island's Robbie Bresson to census the Brown Noddies on Bird Island (see page 12). Providing extra help where needed is not only extremely useful for SSG members, but is also a nice way for members to meet each other and to see other SSG islands- that we may not otherwise get the chance to visit.

Seabird news from Cousine Island

by Frankie Hobro, April 06

Our arrival on Cousine in October coincided with the end of a successful seabird breeding season. On our arrival, the Sooty Terns were long gone but the last Brown Noddy and Lesser Noddy fledglings were still around, practising their aerobatics before getting their independence.

Results of the seabird census, carried out in July, indicate that the total seabird numbers in the 2005 breeding season were slightly lower than previous years, with approximately 50,000 pairs of Lesser Noddies and 1,500 pairs of Brown Noddies. White-tailed Tropic Bird and Fairy Tern numbers remained relatively stable with estimates of 500 and 600 pairs respectively. However, it must be noted that the main seabird breeding season is not the most productive season for the latter two species. Overall breeding success for the season appeared to be high.

Good news is that the Cousine Sooty Tern colony appears to be increasing in size every year, with approximately 1,000 pairs during the 2005 breeding season. This is the highest number yet since the species re-established itself here naturally 3 years ago. Close monitoring will continue during the 2006 breeding season, with on-going ringing of chicks and adults. In addition, with further clearing underway at the North and South points of the island, it is hoped that the colony will continue to increase in size in future years.

The island's Fairy Tern population continues to benefit from the assistance provided by many quarter coconut husks nailed to the trees as artificial nests. More of these are being attached opportunistically and the breeding terns seem to appreciate the extra stability that they provide, making the egg less likely to be lost. One event which proved their efficiency was the surprising discovery that a pair of Fairy Terns hatched two chicks, two days apart in age. The pair of downy chicks survived next to each other in the coconut husk for several days until unfortunately the smallest one died. Regrettably it appears that incubating two eggs was more feasible for the parents than successfully rearing two chicks.

Frigatebirds continue to be a common sight above the island, particularly adult male and female Lesser Frigatebirds. These are often numerous, and sometimes soar very low over the beach, in pursuit of an unfortunate Tropicbird or Fairy Tern. Bridled Tern counts are carried out each month and these birds have been common throughout our time here so far, although we have seen no signs of breeding activity yet.

Several times during December and January, Red-tailed Tropicbirds were observed flying out from the cliffs that sit behind the villas and from Cousine's northernmost point. This species differs in many ways from its smaller White-tailed cousin, not least in the way that it flies, so we are very confident of the sightings. Extensive searches have failed to find a nest, unfortunately, but these are known to be particularly elusive. Should a nest be found, it will be the first record of this species breeding anywhere in the Granitic Seychelles apart from Aride.

At the time of writing, the last of the Wedge-tailed Shearwater chicks have fledged from their hillside burrows, and the Lesser and Brown Noddies are once again starting to increase in numbers ready for another hectic breeding season.

Cousine Conservation Officer Frankie Hobro with Wedge-tailed shearwater chick

Note:
A Brown noddy ringed as an adult on Cousin in 1995 was found breeding on neighbouring Cousine 10 years later in 2005 by Quentin Hagens.

Seabird news from Bird Island

by Margaret Norah, March 06

Two gulls have visited Bird Island recently: a possible third winter Heuglin's Gull and a Black-headed Gull. Unfortunately the Heuglin's Gull died. We put it in the freezer and Adrian Skerrett will deliver it to the Natural History museum for positive identification.

On the other hand, at the end of March a Black-headed gull arrived on the island. This is the first record in Seychelles for this species in full breeding plumage.

White -tailed Tropicbirds

The current number of established nesting sites is **82**. These nesting sites are scattered all over the island, with the main concentration around the chalets. To date we have ringed **123** adults and **77** chicks. This project began in July 2002 and we are able to see which pairs use which nesting sites and when. They do not tend to move sites as a rule. As yet none of the chicks ringed since 2002 have nested. For the first time we have recorded a change of partner. A bird which was ringed in 2002 has now paired with a bird ringed by Robbie Bresson in 2005.

Black-headed gull, Bird Island

Red-billed Tropicbird

We have a Red-billed tropicbird in the vicinity of the island. It is very vocal and has a very loud call and so was noticed very quickly. These birds are vagrants to Seychelles. The nearest nesting sites to us are in the northern Indian Ocean. One day it flew into Robbie's house by mistake and so we were able to ring it. Last year we had one visit Bird at around the same time. It is a much bigger heavier bird than our usual white-tailed ones. It has white tail streamers. There is another variety of Tropicbird in Seychelles which breeds on Aride Island. This is the Red-tailed Tropicbird which has red tail streamers and red bill.

Sooty Terns

Unfortunately Chris Feare was unable to make his annual visit to Bird Island in 2005 to search for ringed Sooty Terns. However, before they went on their annual leave Georges and Margaret Norah arranged for a team to be assembled and subsequently Marie-France Savy garnered other people and provided Chris with regular updates of the birds found. As a result, valuable data were gathered in 2005, for which Chris is immensely grateful.

In total, 313 ringed birds were found. In terms of longevity, two birds that had been ringed as chicks in 1972 (Chris's first year of ringing) were found and 15 ringed in 1973. These birds are thus 33 and 32 years old respectively. The oldest Sooty Tern known is 34 years old – surely Bird Island can beat that!

We also continued to find birds first ringed in other colonies, with one from Recif (a small rocky island between Mahé and Frégate) and three from African Banks (the northernmost island of the Amirantes). In 2005 we had our first birds ringed as chicks in 2002 returning to the colony, at only three years old.

Red-billed tropicbird on Bird Island. These tropicbirds are easily distinguished from their white-tailed cousins by their red bill, larger size and dense black barring on their backs.

Seabird news from Frégate Island

by Frankie Hobro, March 06

At the request of Steve Hill, the Frégate Island Ecologist, I spent 2 weeks on Frégate during August and September 2005 carrying out an island-wide seabird census comprehensive of all habitat types and evenly distributed all over the island. My fieldwork assistant was Nature Seychelles volunteer Rahel Winiger.

As far as we are aware, this is the first comprehensive census to be carried out on Frégate Island, and it is certainly the first seabird census carried out since the eradication of rats in the year 2000. As such the results are both interesting and important for Frégate. The last seabird census conducted on Frégate was in 1999, over a very short time-frame and a very limited area, but it did give a useful indication of numbers, allowing an approximate comparison of the bird populations five years post rat eradication.

The species monitored were Lesser Noddies, Fairy Terns and White-tailed Tropicbirds. Brown Noddies, Bridled Terns and Sooty Terns are present on L'Îlot Frégate and other offshore rocks, and were frequently viewed offshore through binoculars, but none of these species breed on Frégate Island itself, or occur in any significant numbers, so were not included in the present survey.

The survey indicated that over 35,000 pairs of Lesser Noddies presently breed on Frégate, representing an impressive approximately five fold increase since the last survey in 1999. As well as an increase in overall numbers, the distribution of the species also appears to have increased, with the expansion of the areas previously inhabited by breeding birds, and the formation of two new clumps of

breeding birds; a new area around the banyan and *Pisonia grandis* forest in the South East of the island, and another near the guest bungalows around the North of the island. These high numbers are not surprising considering the large areas now covered by this species during the breeding season, and the high densities of the nests within those areas. This boost in Lesser Noddy numbers is consistent with several other islands which, like Frégate, have seen the appearance and subsequent increase of Lesser Noddy populations over the last two decades. The ongoing island-wide habitat restoration on Frégate has no doubt assisted in the sudden increase in numbers, as surely has the successful eradication of rats and Frégate's continued rat free status.

Fairy Tern numbers were estimated at around 6,000 pairs with approximately half this number actively breeding at the time of the census. The timing of the survey probably did not coincide with the most productive time for the species; while they do breed asynchronously, there are definite peaks in activity, usually in the North West monsoon, therefore the total year-round breeding population may be significantly higher. Fairy Terns were found all over the island including in areas of poorer quality habitat such as those dominated by coconut. They were particularly prevalent in areas of mixed woodland and in the dead Sandragon woodland, where they apparently found the dead tree structures to provide perfect breeding sites. These numbers show a slight increase to those found in the previous census, and suggest that the island is an important breeding site for the species, with numbers comparable, by area, to other islands which are already known to be important breeding areas for these birds.

White Terns utilising dead sandragon trees for roosting and nesting.

White-tailed Tropicbirds were frequently sighted flying overhead, and were particularly common around the areas of rocky cliff coast to the south and west of the island. Results of the survey suggested that there were between 20 and 30 breeding pairs on the island when the survey was carried out, but again this species breeds throughout the year so the year-round total breeding population is probably several times higher. Other incidental sightings of individuals suggest that at least another 50 pairs were present on the island but not breeding during the survey period. It is difficult, however, to estimate how many of these are actually associated with L'îlot Frégate and just flying over Frégate. This estimate is considerably higher than that from the previous survey, and no doubt the numbers will continue to rise from now on as this species is predominantly ground nesting and therefore will derive enormous benefit from the eradication of rats.

Despite several excursions at dusk, no evidence of Shearwater activity was noted on the island, and no burrows were found during the survey. Detailed observation in the woodland at night should be carried out to confirm the presence or absence of these birds, since initial re-colonisation is likely to be gradual even this long after rat eradication, and when present in small numbers the birds are generally very elusive.

Seabird News from Cousin Island by Jovani Simeon and Ian Valmont

During 2005 Cousin continued with our long-term study of White-tailed Tropicbirds, and monitored Lesser Noddy breeding success during their seasonal South-east trade wind breeding season. A breeding population census was undertaken for White Terns, White-tailed Tropicbirds, Lesser Noddies and Brown Noddies during June-July. Numbers appear to have remained fairly stable, certainly over the past few years.

Seabird populations have not been censused annually on Cousin but rather every few years. We would like to census every year to enable detection of annual fluctuations and also allow the early detection of any population trends.

Cousin has also taken the decision to employ a staff member entirely dedicated to research and monitoring activities on Cousin. Jennifer Davis joined the Cousin team in this role in May this year. She is supported by the rest of the Cousin team who have the dual

responsibilities of managing both the tourism operation and participating in conservation monitoring and management activities.
Over the next few months we aim to monitor Lesser Noddy breeding success for the fifth consecutive year, continue with the long-term White-tailed Tropicbird study and to conduct a South-east breeding season census of Lesser Noddies, Brown Noddies, White-Terns, White-tailed Tropicbirds and Audubon's Shearwaters. This census is timed to coincide with peak incubation of Lesser Noddies when most birds have laid but few chicks have hatched. It seems this year that the Lesser Noddy breeding season is off to a slow start on Cousin with less nest-building activity than we would expect at this time of year.

This year we will run a trial census of Audubon's Shearwaters at the same time as the others to see if it works well. It will involve some extra work returning to plots at night to check for Shearwater presence, but we think it will be more efficient in the long run to census them all together.

Audubon's Shearwaters breed in burrows that are narrow and can be long and turn corners making it difficult to get ones arm down the burrow far enough to determine whether they are active or not. To determine if there is a bird down an inaccessible burrow we play tape of Audubon calls at the burrow entrance. Audubon's can't resist replying to the tape so the method works very well. It just promises to be interesting work trying to find the burrows in the dark!

Sooty Terns used to breed in profusion on Cousin if records of the number of Sooty Tern eggs collected annually on Cousin are anything to go by. However, Sooties were extinct on the island by 1947. Since we cleared an area for a helipad on Cousin and maintained it's short grass cover, Sooty Terns have shown a great deal of interest in it. We would like to attempt to attract them back using methods recommended by Sooty Tern expert Prof Chris Feare, involving providing suitable nesting habitat, deploying dummies of Sooty Terns sitting in the area and broadcasting Sooty Tern calls.

Cousin staff have been active monitoring seabird incubation shifts and chick growth rates in collaboration with staff from the University of La Reunion as part of the MASMA Seabirds as Bio-Indicators programme Nature Seychelles and Cousin are partners in, (See article on page 10 for further information about the project).

Cousin warden Jovani Simeon measuring Audubon's shearwater chick

Articles

Management of the Roseate Tern breeding habitat on Aride Island: a promising approach

by David Monticelli

Since annual monitoring of Roseate Terns started on Aride in 1984, the population size has fluctuated between 600 and 1200 breeding pairs.
So far, we have found three hypotheses to explain such fluctuations. Firstly, annual variations in fish food availability around Aride: because Roseate Terns breed in higher numbers in years with apparently higher food supply conditions. Secondly, terns are prone to create colonies *ex novo* probably as part of an expanding strategy to increase the overall survival chances of the species: in 2005, a new colony holding ca.300 pairs was discovered on St Joseph Atoll by Adrian Skerrett. There is no previous account of Roseates breeding there, with Aride being the sole large colony in the region. It is possible therefore that the Aride population acted as a source for this new colony. Thirdly, birds may also move out of their usual breeding grounds in response to either human disturbance (e.g. poaching), or to changes in the characteristics of the nesting habitat.
The Aride population has been long secured from disturbance throughout the breeding season thanks to the wardening of the Aride staff. However, in 2003 and 2004, no less than 13% of the total population bred on the nearby Booby Island. Several visits were paid to Booby and breeding adults ringed on Aride in a previous season were found. This was of much concern among the ICS

management committee of Aride Island since the site is highly disturbed by poachers throughout the season. The Roseate Tern is globally the rarest seabird in Seychelles and its worldwide status is relatively fragile. The question was thus "How could we bring them back to Aride?"
The answer came from Prof. Jaime Ramos who has been studying the Aride population since 1997. He observed that on Aride, the Roseate Tern breeds mainly under a tree canopy of *Pisonia* which has been closing increasingly over the last few years. In fact, the study quadrat marked permanently in 1997 in the colony area and re-used each year had been progressively deserted by the birds. We thus hypothesized that vegetation re-growth was possibly unfavorable to breeding Roseates precluding easy flight access down through the canopy to the forest floor to feed their chicks. Vegetation measurements were made in study plots settled in the small area still used by the birds, and compared to other areas that had been occupied in the past but were currently unused. The outcome was striking: canopy cover and vegetation volume were much higher in abandoned areas. As a result, an experiment was planned in June 2004 for the next breeding season. In two study plots delimitated c.50m apart from the actual colony area, trees were cut down by the Aride staff assisted by the Forestry Department of Seychelles. Our expectations were that birds may progressively colonize the area from 2005 onwards.

I arrived on Aride on the 17th of May 2005, early in the Roseate breeding season, for my annual two-month-stay on the island. On the same day, I visited the colony and found Roseate Terns displaying in their usual breeding area. The clearing artificially created was obviously not paid any special attention by the birds. For the next two days, I started to settle my usual working design in the colony to assess, among other things, the annual fledging success. When I arrived in the colony on the 19th early in the morning, however, I noticed several birds prospecting in the artificial clearing. From that day onwards, the number of Roseate Terns was dramatically higher every morning in the clearing. Prof. Jaime Ramos arrived in early June on Aride. We conducted the annual count finding that no less than 469 pairs had laid in and around the clearing. This was two-thirds of the total population that bred on Aride in 2005. In addition, two important points:

Year	Population size (no. pairs)		
	Aride Island	Booby Island	St Joseph
2002	1267	0	0
2003	867	128	0
2004	608	89	0
2005	779	17	300

First, I recorded a higher fledging success in the artificial clearing (60-80%) compared to the more enclosed areas (50%). This should be partly related to higher chick mortality by tick infestation in enclosed areas due to damper conditions. Ticks are also probably more abundant in areas where terns have repeatedly bred than in newly colonized ones.

Secondly, the count made on Booby Island yielded a poor 17 pairs, which was only 2% of the total population (Aride + Booby). This downward trend compared to 2003 and 2004 was not found on Aride (to the contrary, the Aride population increased from 2004 to 2005).

These results are thus very promising for the next years. It is important to follow accurately the vegetation re-growth in the Roseate Tern area and to create artificial clearings when they are not created naturally by windfalls. Our hopes are that the population on Booby Island will not increase while the Aride staff is attentively managing the Roseate Tern area with the aim of maintaining the actual population level in 2006.

Plate 1. Digital hemispherical photograph of the canopy cover (vertical view) before the clearing was created in 2004.

Plate 2. Digital hemispherical photograph (vertical view) of the canopy cover after the clearing has been created in 2005.

David Monticelli is a Ph.D. student working under the supervision of Prof. J. Ramos since 2002 on Aride Island during the Roseate tern breeding season.

Roseate Tern discoveries in the outer islands

by Adrian Skerrett & Gérard Rocamora , Island Conservation Society

As a part of the Outer Island Seabird Census 2004-2009 launched by Island Conservation Society, visits have been made to a number of islands and these continue. Initial findings include confirmation that Roseates breed at Goëlettes, Farquhar, with the discovery of a small colony of 15 pairs. In 1999, we had counted about 50 birds on Goëlettes but did not detect any signs of breeding. Goëlettes is part of the 'Islets of Farquhar' IBA, which hosts a Sooty Tern colony of about 300,000 pairs and where a small colony of about 15 pairs of Black-naped Terns has also been discovered. This is the first time since 1897 that breeding of Roseate Terns has been confirmed on this atoll, when a colony of unknown size was observed by Commander Stuart Farquhar. In addition, a previously unknown colony has been discovered at St Joseph Atoll with 350 pairs present. This makes it the second largest population in Seychelles.

The western Indian Ocean race of Roseate Tern breeds from Seychelles to Madagascar and Cargados Carajos and formerly bred on Rodrigues from where it has been extinct for several decades. In Seychelles, the largest colony is on Aride Island, which gives the subspecies its name, *arideensis*, while in the outer islands there are smaller colonies at Etoile and African Banks. Indeed, Aride may be the largest colony of all for *arideensis*, though information is scanty for colonies in Madagascar, where there may be similar sized colonies. In most years, a small number of Roseates attempt to nest on Booby Island, though poaching limits breeding success. The species has disappeared from many islands where it was previously recorded, including Mamelles, Ile Sèche, Récif, Ile aux Vaches Marines and Bird.

Roseates have been reported from the vicinity of St Joseph before. Glynn Burridge, resident on D'Arros for many years recalls seeing Roseates each southeast season, though he did not know where they were nesting (G. Burridge *pers. comm.*). Also, Michael Betts, en route to Aldabra in June 1998 reported seeing 420 Roseate Terns a mile north of St Joseph. He estimated this to be equivalent to a colony of 350 pairs (remarkably similar to the new estimate) but speculated that the birds came from African Banks. However, the African Banks colony is much smaller with 82 pairs in 1997 (P. Constance, R. Nolin *pers. comm.*). In the light of this new evidence, it seems more likely that the birds observed by Betts came from St Joseph Atoll.

The discovery of a significant colony of Roseates on St Joseph Atoll is particularly exciting. The atoll also hosts one of the largest populations of Wedge-tailed Shearwater in Seychelles, estimated at about 23,000 pairs by Bristol and Millett in 2002. In addition, there is a small number of breeding Black-naped Terns associated with the Roseate Terns. Numbers of all three species satisfy the criteria for consideration as an Important Bird Area (IBA) either in its own right or perhaps as an extension of the existing D'Arros IBA.

It is likely that more colonies of this rare tern exist in the outer islands. Further work is needed to confirm the overall status of Roseates in Seychelles, including a visit planned by ICS to Bancs du Sud, Providence Atoll where there has been no report of breeding since 1970 (Guy Savy *pers. comm.*).

Why does the *Pisonia* tree kill seabirds?

Pisonia grandis known locally as Mapou, is widespread across the tropical indo-pacific. It is most commonly found on small tropical islands with large seabird colonies.
Pisonia seeds are extremely sticky, and are often produced in copious quantities. They adhere to bird feathers, often in such numbers that they render the bird incapable of flying thereby killing it.
This raises the question of whether the *Pisonia* is killing the birds on purpose for some advantage to the *Pisonia* or whether it is a dispersal mechanism, the seeds really only wanting to hitch a ride to another island, and the deaths are accidental.
The frequency of deaths intrigued seabird researcher Dr Alan Burger enough to try and get to the bottom if it. While working for Nature Seychelles on Cousin Island Alan investigated the production, germination, survival, and tolerance to seawater of *Pisonia* seeds, and

the occurrence of entanglement of birds. He looked at 3 possible benefits that might result from producing such extremely sticky seeds: enhanced long distance dispersal, enhanced germination and seedling survival, increased nutrients benefiting established trees. His experiments lead to the conclusion that *Pisonia* plants do not benefit from fatal entanglements. It appears that the extreme stickiness likely evolved to resist removal by the seabirds and to facilitate long distance island to island dispersal via living seabirds. More detail can be found in:

Burger, A. E. 2005. Dispersal and germination of seeds of *Pisonia grandis*, an Indo-Pacific tropical tree associated with insular seabird colonies. *Journal of Tropical Ecology* 21:263-271.

White-tailed Tropicbird entangled in *Pisonia*

ACAP The agreement on the conservation of albatrosses and petrels

The agreement on the conservation of albatrosses and petrels (ACAP) is a multilateral agreement which seeks to conserve albatrosses and petrels by coordinating international activity to mitigate known threats to albatross and petrel populations. ACAP, negotiated under the Convention on the Conservation of Migratory Species of Wild Animals (CMS), was opened for signature in 2001 and entered into force in 2004 after being ratified by 5 countries.

Albatrosses and petrels are among the most threatened birds in the world. Nineteen of 21 albatross species are regarded as globally threatened with extinction and the remaining 2 are near threatened. The greatest threat to many albatross species is incidental catch in long line fisheries. They think they are getting an easy meal, dive and catch the baited fish hooks as they are being let down into the water, get caught, pulled under and drown. It is in no-ones interest that albatrosses and petrels should die on fish hooks, least of all the fishermens, who loose their bait and all chance of catching a fish on the hook also. More than 300,000 birds including 100,000 albatrosses are killed by long line fisheries every year, probably many more as much by-catch is not reported.

There are proven, simple and inexpensive ways to prevent these unnecessary deaths.

While individual countries are taking measures to decrease albatross and petrel by-catch, international cooperation is also required. Fishing boats using the waters of ACAP ratifying countries are obliged to take measures to reduce by-catch. These measures include setting lines at night, deploying bird scaring streamers and weighting lines so that the baited hooks sink more quickly.

ACAP is still in its infancy and much still needs doing to ensure it becomes an effective agreement, such as a number of important range states still need to ratify the agreement, however ACAP marks a leap forward in international commitment to protect these charismatic seabirds.

ACAP recognises that engagement with Regional Fisheries Management Organisations (RFMOs) is fundamental to improving the conservation status of many albatross and petrel populations and is working towards this goal.

Sources: http://www.acap.aq/acap/
ACAP enters into force. World Birdwatch, March 2004 26(1) page 6.
ZWAZO 13, 2005, page 19 Indian Ocean vital for survival of Albatrosses, by Cleo Small.
http://www.cms.int/species/acap/acap_bkrd.htm

Regional Fisheries Management Organisations and their duties to minimise by-catch

Regional fisheries management organisations (RFMOs) are of central importance to sustainable management of the world's oceans. Many marine species, including some of the most sought after fish stocks and some highly vulnerable and charismatic species such as albatrosses and sea turtles

can only be conserved thorough collaboration between States.
Under the international legal framework for the oceans (UN Fish Stocks Agreement/FAO Code of Conduct for Responsible Fisheries), RFMO's have a duty to take action to minimise by-catch of vulnerable non-target species such as albatrosses and petrels.

In 2004-2005 BirdLife International conducted an assessment of the 14 (of 19) RFMOs whose areas overlap with albatross distribution, to evaluate their effectiveness at minimising by-catch, especially albatross by-catch within their fisheries. Our local RFMO, the Indian Ocean Tuna Commission (IOTC) is one of the top five RFMO's in terms of overlap with albatross distribution. IOTC area includes 21% of the global breeding distribution of albatrosses and IOTC has significant fishing effort within 30-50° South, the main area of albatross distribution.

Of the five key RFMO's IOTC scored most poorly. IOTC has no established mitigation measures to reduce by-catch of non-target species. They do not include all non-target species within their mandate, and do not require onboard observer programmes to record by-catch information. There have however been some positive developments including IOTC's decision in 2002 to establish a by-catch working group. The group first met in 2005 and is scheduled to meet again in Seychelles in July 2006. In addition guidelines have been drafted for an IOTC Tuna Fisheries Observer Programme, proposing guidelines for National voluntary observer programmes, but it appears that any compulsory or regional observer programme (the ideal situation) will be some time off.

The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), another of the five key RFMO's for albatrosses, has demonstrated the scale of achievement that is possible through action by an RFMO, having reduced albatross and petrel by-catch in its regulated fisheries by 99%.

Sources:
Small, C. J. (2005). *Regional Fisheries Management Organisations: their duties and performance in reducing bycatch of albatrosses and other species*. Cambridge, UK: BirdLife International.
Small, C.J. (2005). Distribution of Albatrosses and Petrels in the Southern Indian Ocean and the overlap with IOTC longline fisheries. Summary of a presentation to the first meeting of the IOTC Bycatch Working Party, Phuket, July 2005.

IOTC meets in Seychelles

The Scientific committee of the Indian Ocean Tuna Commission (IOTC) met in Seychelles in November 2005. SSG co-ordinator Rachel Bristol represented Nature Seychelles/BirdLife International as part of BirdLife's ongoing programme of interaction with the IOTC.
Among other topics the meeting discussed the report from the first meeting of the IOTC By-catch Working Party held in July 2005, which BirdLife also attended and presented information about seabird by-catch in tuna fisheries and the extent of IOTC fishery overlap with Albatross and Petrel distributions. The role of the by-catch group is to assess the impact of by-catch of vulnerable species of seabird, turtle and shark within the tuna fisheries of the Indian Ocean and recommend mitigation measures to the IOTC Scientific committee.
The By-catch Working Party is meeting again at the end of July 2006 in Seychelles.

Newsflash

The Indian Ocean Tuna Commission (IOTC) has just adopted Resolution 06/04 on reducing incidental by-catch of seabirds in longline fisheries in May this year. Under the resolution all long-line vessels fishing south of latitude 30 degrees South must use bird-scaring lines (Tori poles), and all Contracting Parties and Cooperating non-Contracting Parties (CPC's) must collect and provide information on interactions with and catches of seabirds. Unfortunately longline vessels targeting swordfish are exempt from this agreement, an exemption BirdLife is recommending be removed as available data shows seabird by-catch rates as high as the tuna longline fishery.

Can seabirds be used to monitor the health of the marine environment?

This is a question that a Western Indian Ocean Marine Science Association (WIOMSA) funded project entitled "Seabirds as bio-indicators of tropical marine ecosystems: a regional study in the western Indian Ocean" is working towards answering. Several of the Seychelles Seabird Group member islands are partners in this 3 year project that has just completed its first year.

The ultimate long-term goal of the programme is to use seabirds as bio-indicators of the health of marine ecosystems in the tropical western Indian Ocean and to use the information to contribute to management of the marine habitats and resources of the region. Seabirds are very easy to study compared to fish and other marine animals because they must come to land to breed. If they prove to be useful indicators of marine ecosystem health and change we will have a vastly cheaper and easier ecosystems based technique available for monitoring marine health.

The project has started a long-term study on the feeding ecology, breeding parameters and population structure of the 4 most common seabirds of the western Indian Ocean. This information will be used to assess the possible impacts on seabirds of the natural (eg climate change) and man induced (eg heavy fishing pressure) changes to food webs in the region.

The study has been running since 2002 in the Mozambique Channel, and the WIOMSA funding has enabled extension of the study to the Seychelles Basin where seabirds occur at high numbers and coexist with an important and growing industrial purse- seine fishery.

The project is headed by Dr Matthieu Le Corre and is a joint effort between the laboratory ECOMAR at the University of Reunion, Nature Seychelles, Island Conservation Society, the Conservation Section of the Seychelles Ministry of Environment and Natural Resources, the University of Coimbra in Portugal, the French Institute for Research and Development IRD, WildWings Bird Management and other collaborators.

Local staff have been working alongside visiting researchers collecting information on seabird breeding success, incubation shift length, chick diet, chick growth rates, chick feeding frequency and feeding times, and other information on Aride, Cousin and Bird Islands. This information will be compared with data collected in previous years and other marine variables such as marine productivity measured by chlorophyll concentration, El Nino strength measured by multivariate el Nino index, tuna and other fish abundance measured by catch per unit effort information, and sea temperature.

Project researchers have also spent time in the laboratory analysing the chick meals collected in the field to determine exactly what their parents are feeding them and measuring heavy metal contents in feathers and blood to determine where the parent birds are fishing.

In addition a course was specifically designed and run at the University of La Reunion to train Seychellois working on this project in seabird ecology, seabird field research techniques and laboratory techniques related to seabird study. Staff members from Cousin (Ian Valmont), Aride (Tony Jupiter) and the Ministry of Environment (Perley Constance) attended the month long course.
Three more local staff will have the opportunity to attend the course this year.

Ian and Tony analysing seabird meals in the Lab at the University of La Reunion.

Anti-poaching network

Early in 2005 an anti-poaching network was set-up by the Ministry of Environment and Natural Resources. We'd like to think that pressure from the SSG, both lobbying as a group and individually

from members, helped to get the movement underway. Certainly the collaboration formed between neighbouring islands and organisations as a result of the meetings was an enormous benefit to the overall anti-poaching effort.

Early indications are that the network is having a positive effect and reducing poaching.

For the first time in several years Aride and Booby islands remained relatively undisturbed by poachers, and the formation of the anti-poaching network likely played a significant role in this.

Aride warden Frankie Hobro is of the opinion that, to the best of her knowledge, Aride Island was not visited by poachers in the 2005 Sooty tern breeding season, and Booby Rock received less poaching attention that usual, due to a combination of several factors:

- There were a lot of Sooty tern eggs on sale from legal sources satisfying the demand for eggs
- Rumour that armed guards were stationed on Aride may have deterred poachers
- Anti-poaching network and associated media coverage
- Publicity that a fast boat (part of the anti-poaching network) was stationed at Curieuse and on call to investigate any poaching incidences
- Rough weather and the fact that someone drowned about 400m off the northern side of Aride coinciding with the start of egg season
- Aride staff made regular trips around Aride by boat and their persistent presence likely deterred poaching (on several occasions boats were moved on from the protected Aride marine zone).

This does not mean we can sit back and relax; poaching has been part of Seychelles culture for many years and it would be naive to expect that it is going to stop this quickly and easily.

Seabird poaching: the saga continues…

In May 2004 Justice Ranjan Perera sentenced six men to two years in prison after finding them guilty of illegal possession of turtle meat and two them also of killing protected birds (booby's). The case dates back to an incident in January 2003 when the men were arrested and police seized 38 gunny sacks containing over 1000 kilos of suspected salted turtle and booby meat at Providence.

Mr Selby Remie, the Director for Conservation in the Ministry of Environment and Natural Resources said Justice Perera's sentence would help people begin to realise the seriousness of the problem.

However, all did not end with the six serving their full sentence. In May 2005 exactly one year after sentencing, the five men who appealed their sentence were acquitted of the charges by the Court of Appeals. The acquittal had little to do with whether the men were guilty or not of poaching turtles and booby's; it was due to the fact that legal procedures were not followed.
The President of the Court of Appeal, Michael Ramodibedi, sitting with Justice of Appeal, Jacques Houdoul, found that Supreme Court Judge Perera had not allowed the defence lawyer to question prosecution witnesses. Preventing cross-examination, a normal court procedure, was wrong because it infringed on the rights of the accused to a proper trial, said the Justices of Appeals. In addition they said the Ministry of Environment staff member brought in as an expert prosecution witness did not prove sufficiently that the meat in question was in fact illegal turtle and seabird meat.

These two shortcomings highlight the importance of adequate training for ministry and other wardening staff in evidence collection and presentation. Court procedures must be followed at all times and one would hope that judges also receive regular training. It is unacceptable for people perhaps guilty of serious offences to walk free because legal representatives fail to follow standard procedures.

Bird Island Brown noddy count

A census of Brown Noddy or Makwa was carried out on Bird Island in March 2005, during the north-west (NW) monsoon. The census was done late in the breeding cycle when the majority of nests contained chicks. The number of breeding pairs counted in this census should be taken as a minimum as nests high in coconut crowns can be impossible to see, and many of the chicks from nests on the ground had already fledged, leaving no trace as ground nesting Brown Noddies do not build nests but lay directly on the ground. The total count of those nesting on the ground was 510 pairs and the total for those in trees was 5,451 pairs.

Both ground and tree-nesting pairs preferred to nest in areas with an open lawn ground layer. Some birds were nesting in tall coconut palms with a dense scrub below, but in far lower numbers and densities than in coconut palms over lawns. Sub-canopy coconut palms were not used for nesting. The vast majority of tree nests were in coconut palms with very few nests in other tree species.

Interestingly the main breeding season for Brown Noddies on Bird appears to be during the NW monsoon (November – April) (Margaret Norah and Robbie Bresson, pers coms), in contrast to the inner Granitic islands, where the vast majority breed in the South East monsoon, from May to October. A small portion of the Aride population also breeds in the NW monsoon, but on Cousin and Cousine breeding occurs almost exclusively in the SE season.

In light of this, the census team of Rachel Bristol, Unels Bristol and Robbie Bresson recommend that Brown Noddies be counted again during the SE season. This will provide an idea of the numbers nesting at this time, and an estimate of the year-round breeding population.

Voluntary help

A volunteer from Germany has been helping out with seabird counts on Cousin and Cousine. Harald Legge, a teacher by trade and conservationist volunteer in his spare time, spent a week on Cousin Island carrying out counts of Lesser Noddy, Fairy Tern, White-tailed Tropicbird and Brown Noddy. Harald was assisted by Cousin warden Francois Letourdie, whose navigation skills (he was a fisherman in a former life) came into force following the compass to locate the sometimes too well camouflaged permanent plot markers. Harald then went on to Cousine Island to cover for Conservation Officer Quentin Hagens while Quentin was on annual leave. He continued an ongoing study of Lesser Noddy and White-tailed Tropicbird breeding success.

Volunteer Harald Legge conducting seabird census on Cousin

Who are the SSG?

Aldabra Atoll (Seychelles Islands Foundation) – Lindsay Chong-Seng
Aride Island – Ben Sampson
Bird Island – Guy Savy/Robbie Bresson
Cousin Island – Jovani Simeon
Cousine Island – Dylan Evans/Frankie Hobro
Frégate Island – Steve Hill
Islands Conservation Society – Gerard Rocamora
Seychelles Ministry of Environment – Selby Remie
Nature Seychelles – Rachel Bristol (Seabird Group Coordinator)

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