
Expedition Research Report
Humboldt Current and the
Juan Fernández archipelago
November 2014

Expedition Team

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Juan Fernández Petrel KZ



Stejneger's Petrel *AW*

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White-bellied Storm-petrel *JR*

REPORT SUMMARY

This report summarises our observations of seabirds seen during an expedition from Chile to the Juan Fernández archipelago and return, with six days in the Humboldt Current. Observations are summarised by marine habitat – Humboldt Current, oceanic passages between the Humboldt Current and the Juan Fernández archipelago, and waters around the Juan Fernández archipelago. Also summarised are land bird observations in the Juan Fernández archipelago, and cetaceans and pinnipeds seen during the expedition. Points of interest are briefly discussed.

INTRODUCTION

Goals To advance knowledge about a number of poorly known tubenoses that nest either within the Juan Fernández archipelago or visit the region to exploit the nutrient-rich upwelling associated with the cold Humboldt Current. The expedition follows that of Shirihai *et al.* (2016) and, accordingly, is the second of its type around the Juan Fernández archipelago in recent times. See Shirihai *et al.* (2016) for details about feeding behavior of the speciality *Pterodromas*, the natural history, and the conservation of the Juan Fernández archipelago.



The Team *MD*

Left to right: KZ, AW, JR, RF and JS (gap on left where MD should stand)

Team Robert L. Flood (Isles of Scilly, UK), Angus C. Wilson (New York, NY, USA), Kirk Zufelt (Sault Ste. Marie, Canada), Mike Danzenbaker (Mountain View, CA, USA), John Ryan (Cornwall, UK), and John Shemilt (New York, NY, USA).

Methods Pelagic observations were made continuously during daylight hours. While travelling, a fish-oil drip ran during daylight hours, a ‘splasher’ was towed and, at key locations, a mesh bag containing fish scraps was towed. A ‘splasher’ or Boon Bird Teaser splashes in the wake and attracts the attention of game fish and seabirds by creating a visible and continuous splashing on the surface. While drifting and chumming, typically for three to five hours, a fish oil slick was laid, replenished multiple times, and other fish products were added to it. Pieces of chopped fish were also dispensed by hand to attract albatrosses and the larger petrels. Imagery involved digital still photography and videography. The route was tracked using the vessel’s global positioning satellite (GPS) together with personal devices.

Vessel The yacht *Sauvage* is an 18 metre steel-hulled oceanic expedition sailing yacht, equipped with a dingy. The yacht is owned and crewed by veteran expedition sailors Didier and Sophie Wattrelot.

ITINERARY AND CONDITIONS

We sailed from Quintero, Chile, across the Humboldt Current and on to the Juan Fernández archipelago, then spent time in the archipelago, then returned to the Humboldt Current off Quintero, and lastly headed N to Coquimbo, Chile. Like all oceanic expeditions, the route taken was influenced by weather conditions and sea state. For chumming locations, we used a number of coordinates within the Juan Fernández archipelago given in Shirihai *et al.* (2016) and tried several other locations.

Nov 4th Departed Quintero at 08.30, headed directly to Robinson Crusoe Island (formerly Más a Tierra) and soon entered the Humboldt Current (flowing N at about 1 knot). Wind SW 20 knots, swell 1–2 meters, sea temperature in the Humboldt Current 12°C. Made headway at 5–7 knots using the engine.

Nov 5th Exited the Humboldt Current by first light. Continued toward Robinson Crusoe Island. Wind W 10–15 knots, swell 1–2 meters, sea temperature 15°C (varied between 15°C and 16°C until re-entering the Humboldt Current on the return leg). Made headway at about 5–6 knots using the engine.

Nov 6th Continued toward Robinson Crusoe Island. Wind SW 15 knots, swell 1–2 meters. Made headway at about 5–6 knots using the engine.

Nov 7th Arrival at the first chumming spot 19 miles E of Robinson Crusoe Island at 09.30. Drifted until about 19.20 and then relocated to N of Robinson Crusoe Island for the night. Wind S 10–15 knots, swell 1–2 meters.

Nov 8th Weather forecasts predicted 3–4 days good weather followed by strong winds. Thus, we headed straight to Alexander Selkirk Island (formerly Más a Fuera), the farthest and most remote location of the expedition. Set off from Robinson Crusoe Island at about 10.00. Wind S 10–15 knots, swell 1–2 meters. Made headway at about 7–9 knots by sail.

Nov 9th Arrival at chumming location by first light, about 22 miles SW of Alexander Selkirk Island. Drifted all day until dark, moving N about 12 miles. Wind SW 10–15 knots, swell 1–2 meters. Relocated to N of Alexander Selkirk Island for the night.

Nov 10th At first light, set off toward a chumming location about 23 miles SE of

Alexander Selkirk Island. Passed by the location of a dark-morph *Fregetta* sighting in March 2013 (Shirihai *et al.* 2015). En route, spent time with several feeding flocks of tubenoses. Arrived at chumming location at about 17.00, drifted until dark, and then set off for Robinson Crusoe Island to arrive before the worst of the bad weather.

Nov 11th Progressed farther than anticipated by first light, being about 36 miles off Robinson Crusoe Island. Wind SSE 25–30 knots, swell 2+ meters. Made headway at 6–8 knots by sail. Proceeded to the W of the island and followed the coastline to Cumberland Bay. Dropped anchor at 15.30.

Nov 12th At anchor, Cumberland Bay, Robinson Crusoe Island.

Nov 13th At anchor, Cumberland Bay, Robinson Crusoe Island.

Nov 14th Departed Cumberland Bay around 08.30 and headed toward the Humboldt Current at about 6–8 knots by sail. Wind SSE 25 knots, swell 2+ meters.

Nov 15th Continued toward the Humboldt Current. Wind SSE 25 knots, swell 2+ meters. Made headway at about 6–8 knots by sail.

Nov 16th Arrived in the Humboldt Current by first light, roughly 90 miles W of Quintero, Chile. Sailed slowly toward a seamount about 40 miles W of the coast, though diverted to check groups of rafting tubenoses. Conditions calm, wind SSE 5 knots, swell 0.5 meters. Drifted overnight.

Nov 17th Travelled E by engine to about 12 miles off the coast, observing numbers and changes in species mix, then headed N. Conditions calm, wind SSE 5 knots, swell 0.5 meters. Drifted overnight.

Nov 18th Position at first light was c. 200 miles S of Coquimbo and 12 miles offshore. Continued N at about 4 knots by engine, later by sail, occasionally drifting and chumming. Conditions remained calm until late afternoon; wind SSE 0–5 knots, swell 0–0.5 meters, becoming S 20–25 knots with rising swell by 19.00. Drifted overnight.

Nov 19th Position at first light was c. 100 miles S of Coquimbo and 15 miles offshore. Continued N by sail at 6–8 knots. Wind SSE 20–25 knots, swell 2 meters. Entered Coquimbo Bay about 16.30 for safe anchorage.

Nov 20th Travelled slowly N in Coquimbo Bay by engine, slowing / stopping occasionally to observe diving petrels. Wind S 5–10 knots, swell 0.5 meters. Arrived at final destination by about 14.00, in time to complete paperwork for next day's disembarkation.

BIRD SPECIES ACCOUNTS

Summary

Species accounts for the three different oceanic habitats are presented below in the following order: (1) Humboldt Current and Coquimbo Bay. (2) The passages Chile to Juan Fernández and return. (3) At sea off the Juan Fernández archipelago. (4) Ashore on Robinson Crusoe Island for endemic land birds. The species accounts are illustrated with photographs and video links. We compare our sightings to those of Shirihai *et al.* (2016) who undertook a similar expedition in March 2013. The table below summarises our observations of at-sea sightings of seabird species in numbers per day (four-letter alpha codes are explained in the appendix).

Humboldt Current and Coquimbo Bay (4th, 16th–20th)

We refer to the 4th as the outward leg and the 16th–20th as the return leg. We dripped oil in daylight hours and on the return leg undertook several chumming sessions. Conditions were near to or completely flat calm from the 16th to early afternoon on the 18th. During late afternoon the wind strengthened to S 20–25 knots with swell rising to 2.0 meters by 19.00. After sheltering in Coquimbo Bay overnight on the 19th, we sailed across a calm bay to reach our final destination at Coquimbo anchorage late afternoon. We treat birds in Coquimbo Bay on the 20th separately from birds in the Humboldt Current.

Wandering Albatross *Diomedea [exulans]*

Breeding The five taxa of this group breed biennially, each breeding cycle taking about a year, on islands mainly in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean.

Records Just one on the 17th. Shirihai *et al.* (2016) report only one Wandering Albatross, a juvenile, in March 2013.

Northern Royal Albatross *Diomedea sanfordi*

Breeding Biennial on islands off New Zealand, each breeding cycle taking about a year.

Records Three on the outward leg on the 4th. On the return leg, three seen in the southernmost region of the Humboldt Current that we covered, with one on the 16th and two on the 17th. Shirihai *et al.* (2016) consider Northern Royal Albatross a Humboldt Current speciality. They logged more birds than us with the largest number of 22 together during a chumming session in March 2013. All were younger immatures. Southern Royal Albatross *Diomedea epomophora* was not recorded during our expedition or Shirihai *et al.*'s (2016) expedition.

Chatham Albatross *Thalassarche eremite*

Breeding Pyramid Rock in the Chatham Islands, New Zealand, August–April.

Records Recorded solely in the Humboldt Current with in total just six immatures. Shirihai *et al.* (2016) recorded two immatures in March 2013. The Humboldt Current offers a unique chance to study rarely seen immature plumages of this species.

Salvin's Albatross *Thalassarche salvini*

Breeding Mainly in the Bounty and Snares Islands, New Zealand, September–April.

Records Seen daily with 2–5 each day, except for 68 logged on the 18th. Of the 68, about 50 were becalmed and rafting together. Shirihai *et al.* (2016) consider Salvin's Albatross a Humboldt Current speciality. They logged 35 in total with a maximum of 15 during a chumming session in March 2013. Like Chatham Albatross, the Humboldt Current offers a unique chance to study rarely seen immature plumages of this species.

Video Immature plumages typical in the Humboldt Current. [click here](#) & [click here](#)

Black-browed Albatross *Thalassarche melanophrys*

Breeding Mainly on islands in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–April.

Records Seen every day involving 106 birds. Fifteen were seen on the outward leg and 91 on the return leg, with 10–15 each day, except 44 on the 18th. Two were logged on the 20th within Coquimbo Bay. Of the 44 on the 18th, about 30 were becalmed and rafting. Only two adults were seen during the expedition (mid breeding season). Shirihihi *et al.* (2016) found 24 birds in March 2013 and about half of them were adults.

Buller's / Pacific Albatross *Thalassarche bulleri* / *sp.*

Breeding Buller's Albatross breeds on Snares and Solander Islands, and around Stewart Island, New Zealand, January–September. Pacific Albatross breeds mainly in the Chatham Islands, New Zealand, November–July.

Records A total of 47 logged, with all but two seen in the Humboldt Current. Just one was recorded on the outward leg while, on the return leg, as we moved N in the Humboldt Current 16th–19th, numbers steadily decreased from 20 on the 16th to four on the 19th. All birds seen well were Pacific Albatross, immatures and adults.



Pacific Albatross KZ

Video All birds seen well were the as yet undescribed Pacific Albatross [click here](#)

Other albatrosses Shirihihi *et al.* (2016) found three young Grey-headed Albatrosses *Thalassarche chrysostoma* during chumming sessions.

Southern Giant Petrel *Macronectes giganteus*

Breeding Mainly on Subantarctic islands and the Antarctic mainland in the higher latitudes of the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–May.

Records Much scarcer than Northern Giant Petrel. Seen on two out of the five days, involving just three immature birds. Shirihihi *et al.* (2016) undertook five chumming sessions in March 2013 and attracted 21 birds, most being young / mid immatures.

Northern Giant Petrel *Macronectes halli*

Breeding Circumpolar, mainly on Subantarctic islands at temperate latitudes, August–March.

Records Seen every day with a total of 21 immature birds. In five chumming sessions in March 2013, Shirihai *et al.* (2016) attracted 18 birds, most being immatures.

Juan Fernández Petrel *Pterodroma externa*

Breeding Alexander Selkirk Island, September–May.

Records Tiny numbers compared to the daily counts in the Juan Fernández archipelago. Even so, seen on two out of five days, with three on the 18th and 30 on the 19th. Shirihai *et al.* (2016) expressed surprise that this species was feeding / penetrating well into the Humboldt Current. In March 2013, in five chumming sessions, they counted 531 birds, most around the Continental Shelf, but a handful were just 34 miles off the coast. The 30 that we logged on the 19th were just 15 miles offshore and reinforce the observation that this species will forage over a variety of marine habitats.

De Filippi's Petrel *Pterodroma defilippiana*

Breeding Santa Clara Island and islets off Robinson Crusoe Island, Juan Fernández archipelago, and Desventuradas Islands, June–January.

Records Seen every day, with a total of 176 and a daily range of 29–75, except just five on the departure day when we sailed from shore. Shirihai *et al.* (2016) report 34 birds during their two legs in March 2013, of which two were moulting adults and the rest were recently fledged juveniles. We found that the behaviour of this species notably differed from other *Pterodromas*, being very curious with the splashers, more inclined to linger in the wake, and more willing to come close to the vessel. Neither our expedition nor the March 2013 expedition recorded Stejneger's Petrel *P. longirostris* in the Humboldt Current.

White-chinned Petrel *Procellaria aequinoctialis*

Breeding Mainly on islands in temperate latitudes in the S Atlantic, across the S Indian Ocean, to New Zealand in the S Pacific Ocean, October–May.

Records Common in the Humboldt Current where we logged 881. Only 10 were seen on the outward leg, with daily counts of 51–400 on the return leg. The number of birds increased as we headed N in the Humboldt Current. Most birds had very little white on the chin, like populations from New Zealand and southern S America. Shirihai *et al.* (2016) saw a total of 143 birds in five chumming sessions in March 2013.

Video Common in the Humboldt Current, video shows diving [click here](#)

Westland Petrel *Procellaria westlandica*

Breeding S Island, New Zealand, April–September.

Records Considerably scarcer than White-chinned Petrel. Seen only on the day of departure, with eight on the 4th, interestingly, all relatively close to shore. Notably, none were logged as we headed N in the Humboldt Current. However, in March 2013, Shirihai *et al.* (2016) attracted 78 birds, mostly during the five chumming sessions between 34 to 43 miles off the coast. The small number of this species observed in November (2016) compared to March (2013) is noteworthy. Shirihai *et al.* (2016)

encountered none beyond the Humboldt Current, and we recorded just one, on the first day out of Robinson Crusoe Island on the return leg. This species is considered to be another Humboldt Current specialist by Shirihai *et al.* (2016).

Other *Procellaria* petrels Shirihai *et al.* (2016) recorded a single Parkinson's Petrel *P. parkisoni* on the 3rd March 2013.



Westland Petrel JR

Pink-footed Shearwater *Ardenna creatopus*

Breeding Mainly Santa Clara Island and Robinson Crusoe Island, Juan Fernández archipelago, and Mocha Island, Chile, November–May.

Records Very common, with a total of 852 birds and daily counts of 100–400. Ten on the 20th in Coquimbo Bay. Shirihai *et al.* (2016) found the species abundant in March 2013, with a minimum count of 1,495 birds in or close to the Humboldt Current.



Pink-footed Shearwater KZ

Video Abundant in the Humboldt Current [click here](#)

Sooty Shearwater *Ardenna griseus*

Breeding Mainly temperate and Subantarctic islands off New Zealand, far SW of S America, and the Falkland Islands, October–May.

Records Very common, especially close to shore, with a total of 1,435 and daily counts of 50–500. About 200 were logged on the 20th in Coquimbo Bay. Inshore foraging

is consistent with our pre-expedition land-based sightings, where many thousands of Sooty Shearwaters were seen along the coastline from San Antonio to Quintero. In March 2013, Shirihai *et al.* (2016) witnessed a mass northward movement, including a concentration of 400 birds on 3rd March.

Other shearwaters In March 2013, Shirihai *et al.* (2016) also found Great Shearwater *Ardenna gravis* (4), Manx Shearwater *Puffinus puffinus* (1), and Little Shearwater *P. assimilus* (1) in the Humboldt Current, and Buller's Shearwater *A. bulleri* (4) on the crossing to the Juan Fernández archipelago.

Wilson's / Fuegian Storm-petrel *Oceanites [oceanicus] chilensis*

Breeding Chilean Fjords, probably December–April.

Records Very common, with a total of 1,246 and daily counts of 90–500, except for just six on the departure day when we travelled from inshore. Only two were logged on the 20th in Coquimbo Bay. Of the 400 seen on the 18th, about 250 were over an oil slick that we laid. Shirihai *et al.* (2016) also found them to be very common in the Humboldt Current. They detected among them a few nominate *O. oceanicus*. The majority of individuals that we saw were in fresh plumage, presumably juveniles, with only a very few showing extensive wear or moult in flight feathers, presumably adults. A first-summer Long-tailed Skua *Stercorarius longicaudus* preyed a Fuegian Storm-petrel on the 17th (details in Flood *et al.* 2015).

Video Attracted by oil dripper and showing whitish in the underwings [click here](#)

Video Attracted by oil dripper and showing ulnar bar on the upperwings [click here](#)

Video 'Dancing with waves' over an oil slick [click here](#)

Note As a matter of interest, contention remains about who was responsible for the first formal description of the Chilean form of Wilson's Storm-petrel – Fuegian Storm-petrel, and accordingly the source of the scientific name *O. o. chilensis* (see Palma *et al.* 2012a, 2012b). It is generally agreed that Murphy (1936) published the first comprehensive description of a designated holotype specimen including the locality [AMNH 446292, Wollaston Island, Tierra del Fuego, Chile].

Elliott's Storm-petrel *Oceanites gracilis*

Breeding Poorly known, a few islands off N Chile and presumably in the Galapagos archipelago.

Records A species of the Humboldt Current, typically from the Galápagos archipelago S to about 35°S. Just one bird confirmed on the 18th, though it is possible that others may have been overlooked. Shirihai *et al.* (2016) did not record this species in March 2013.

White-bellied Storm-petrel *Fregetta grallaria*

Breeding Four subspecies currently recognised with *F. g. segethi* breeding on Santa Clara Island, off Robinson Crusoe Island, Juan Fernández archipelago. The possibility of seasonal taxa in the Juan Fernández archipelago is hypothesised in Shirihai *et al.* (2016); they saw some relatively large and chunky individuals, and Murphy (1936) found chicks of various ages one January.

Records It was somewhat of a surprise to come across singles of this species in the Humboldt Current on the 4th and the 18th, and three on the 19th. Shirihai *et al.* (2016) did not record this species in the Humboldt Current in March 2013.

Peruvian Diving Petrel *Pelecanoides garnotii*

Breeding Poorly known, but probably mainly inshore islands of S America from 6–37°S, eggs laid most months and there may be two egg-laying peaks.

Records One was close to shore off Quintero on the day of departure and 25 were logged on the 20th in Coquimbo Bay. Shirihai *et al.* (2016) logged one Common Diving Petrel *P. urinatrix* in March 2013, but no Peruvian Diving Petrels.



Peruvian Diving Petrel KZ

Video Common in Coquimbo Bay [click here](#)

Red-necked Phalarope *Phalaropus lobatus*

Breeding Circumpolar in coastal regions of the Arctic, June–September.

Records Small groups were encountered on three days, with a total of 43 and a daily range of 8–20.

Red Phalarope *Phalaropus fulicarius*

Breeding Circumpolar in coastal regions of the Arctic, June–September.

Records By far the commoner of the two phalaropes, seen every day, except for the departure day, with a total of about 1,000 and a daily range of 14–600.

Phalarope sp. *Phalaropus sp.*

Records Some distant groups c. 280 birds probably largely comprised Red Phalarope.

Chilean Skua *Stercorarius chilensis*

Breeding Along the coasts of Chile S of 37°S, and along the coasts of southern Argentina, November–March.

Records A small number encountered daily, with a total of 31 and a daily range of 2–10.

Parastic Jaeger *Stercorarius parasiticus*

Breeding Arctic tundra and adjacent habitats, May–September.

Records None in the Humboldt Current. One logged on the 20th in Coquimbo Bay.

Long-tailed Jaeger *Stercorarius longicaudus*

Breeding Mainly Arctic tundra, May–September.

Records One first-summer that predated a Wilson’s Storm-petrel (Flood *et al.* 2015).

Video Long-tailed Skua predation of a Wilson’s Storm-petrel [click here](#)

Jaeger sp. *Stercorarius sp.*

Records Three distant jaegers were seen.

Swallow-tailed Gull *Creagrus furcatus*

Breeding Mainly the Galápagos archipelago, asynchronous breeders.

Records An immature bird flew around the boat for about five minutes on the 18th.

Passages Humboldt Current to Juan Fernández and return (5th–6th, 14th–15th)

The outward crossing from the edge of the Humboldt Current to Juan Fernández took two-and-a-half days, arriving at our first chumming spot off Robinson Crusoe Island at about 09.40 on the 7th. Conditions were reasonable with SW 15 knots wind and 1–2 meters swell, permitting day-long observations from deck. The return crossing took another two days, departing Robinson Crusoe Island early morning on the 14th, arriving 90 miles W of Quintero at first light on the 16th. Challenging conditions with



Wandering Albatross JR

We have not concluded our research into the forms of WAAL that we encountered.

SSE 20–25 knots wind and 2–3 meters swell restricted somewhat on-deck observations on the return crossing. Shirihai *et al.* (2016) did not detail their observations from their crossings of the Humboldt Current to / from Robinson Crusoe Island.

Wandering Albatross *Diomedea [exulans]*

Breeding The five taxa of this group breed biennially, each breeding cycle taking about a year, on islands mainly in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean.

Records Two on the outward passage on the 6th, one on the return passage on the 15th.

Northern Royal Albatross *Diomedea sanfordi*

Breeding Biennially on islands off New Zealand, each breeding cycle taking about a year.

Records Three on the outward passage, with two on the 5th and one on the 6th, but none on the return passage.

Salvin's Albatross *Thalassarche salvini*

Breeding Mainly in the Bounty Islands and Snares Islands, New Zealand, September–April.

Records Two recorded, one on the outward passage on the 5th, the other on the return passage on the 14th.

Black-browed Albatross *Thalassarche melanophrys*

Breeding Mainly on islands in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–April.

Records The most widespread and numerous albatross, a total of 27 were logged on the two passages, with 13 on the outward passage and 14 on the return passage.



Black-browed Albatross juvenile KZ

Buller's / Pacific Albatross *Thalassarche bulleri* / sp.

Breeding Buller's Albatross breeds on Snares and Solander Islands, and around Stewart Island, New Zealand, January–September. Pacific Albatross breeds mainly in the Chatham Islands, New Zealand, November–July.

Records Clearly an albatross of the Humboldt Current, with only one on the outward passage on the 6th.

Northern Giant Petrel *Macronectes halli*

Breeding Circumpolar, mainly on Subantarctic islands at temperate latitudes, August–March.

Records Another widespread tubenose with 14 seen, six on the outward passage and eight on the return passage.

Cape Petrel *Daption capense*

Breeding Mainly on Subantarctic islands and the Antarctic mainland in the higher latitudes of the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–May.

Records Almost totally restricted to the Juan Fernández archipelago, with just one seen on the outward passage as we approached the archipelago on the 6th. Shirihai *et al.* (2016) found one in the Humboldt Current in March 2013.

Juan Fernández Petrel *Pterodroma externa*

Breeding Alexander Selkirk Island, September–May.

Records The 75 recorded on the two passages represented a small portion of the breeders from the Juan Fernández archipelago, with 15 on the outward passage on the 6th and 60 on the return passage, of which 50 were seen on the 15th.



Juan Fernández Petrel KZ

Kermadec Petrel *Pterodroma neglecta*

Breeding Nominate in the western and central Pacific, from Lord Howe Island in the W to the Pitcairn Islands in the E. Subspecies *P. n. juana* on Robinson Crusoe Island and Santa Clara Island, Juan Fernández archipelago, and Desventuradas Islands. Breeding varies according to location, but taken together breeding is year round.

Records Only one bird was logged on the two passages, on the 6th, reflecting the small breeding population in the Juan Fernández archipelago.

De Filippi's Petrel *Pterodroma defilippiana*

Breeding Santa Clara Island and islets off Robinson Crusoe Island, Juan Fernández archipelago, and Desventuradas Islands, June–January.

Records Regular on the two passages, with 100 logged in total, of those 64 were seen on the outward passage and 36 on the return passage. Photographs show that the majority of birds had worn plumage and a few had just started primary moult. Also, we noted significant variation in facial markings.



De Fillipis Petrel AW

White-chinned Petrel *Procellaria aequinoctialis*

Breeding Mainly on islands in temperate latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, October–May.

Records Decidedly scarce outside of the Humboldt Current, though seen every day on the passages, with 38 on the outward passage and four on the return passage. Shirihihi *et al.* (2016) saw just four individuals beyond the Humboldt Current. Apart from 30 on the first day out of the Humboldt Current, on the 5th, we logged just 12 more birds. This accords with Shirihihi *et al.*'s (2016) observation that White-chinned Petrel is very much a cold-water species at these latitudes.

Westland Petrel *Procellaria westlandica*

Breeding S Island, New Zealand, April–September.

Records Only one sighting away from inshore Quintero, an individual on the 14th.

Pink-footed Shearwater *Ardenna creatopus*

Breeding Mainly Santa Clara Island and Robinson Crusoe Island, Juan Fernández archipelago, and Mocha Island, Chile, November–May.

Records Plentiful, with 590 on the two passages, 80 on the outward passage and 510 on the return passage, 500 of which were logged on the 14th.

Sooty Shearwater *Ardenna griseus*

Breeding Mainly temperate and Subantarctic islands off New Zealand, far SW of S America, and the Falkland Islands, October–May.

Records A very strong preference for the Humboldt Current and inshore waters, with just one bird seen throughout the two passages.

Wilson's / Fuegian Storm-Petrel *Oceanites [oceanicus] chilensis*

Breeding Chilean Fjords, probably December–April.

Records A total of 160 were recorded on the outward passage and, remarkably it seemed, not one on the return passage. However, Shirihai *et al.* (2016) observed that the species is virtually absent outside of the Humboldt Current.

White-bellied Storm-petrel *Fregetta grallaria*

Breeding Four subspecies currently recognised, with *F. g. segethi* breeding on Santa Clara Island, off Robinson Crusoe Island, Juan Fernández archipelago. The possibility of seasonal taxa in the Juan Fernández archipelago is hypothesised in Shirihai *et al.* (2016), since they saw some relatively large and chunky individuals plus Murphy (1936) found chicks of various ages one January.

Records Observed on both passages, with the great majority on the days nearest to the Juan Fernández archipelago; 20 on the 6th (also, see following species account), 40 on the 14th, and six on the 15th. The latter were forerunners to the unexpected sightings of a small number in the Humboldt Current.

‘White-bellied’ storm-petrel *Fregetta* sp.

Records Shirihai *et al.* (2015) report variation in size and bulkiness of ‘white-bellied’ storm-petrels observed off Juan Fernández. Likewise, on the 6th, for about five minutes, two smaller ‘white-bellied’ *Fregetta* storm-petrels joined about 20 White-bellied Storm-petrels following the yacht, attracted by the oil drip. They joined the farthest trailing storm-petrels and looked about 20% smaller. Initially, they were briefly thought to be White-faced Storm-petrels *Pelagodroma marina* based on their comparatively small size. The two birds moved in and out of the wake, were lost to view from time to time, but could be picked out again by their smaller size.

Chilean Skua *Stercorarius chilensis*

Breeding Along the coasts of Chile S of 37°S and along the coasts of southern Argentina, November–March.

Records Singles were seen on the outward passage on the 5th and 6th.

South Polar Skua *Stercorarius maccormici*

Breeding Circumpolar, Antarctic mainland, October–February.

Records Just one bird seen during the expedition, on the outward passage on the 6th.

At Sea off the Juan Fernández Archipelago (7th–11th)

Arrived at the first chumming spot E of Robinson Crusoe Island at about 09.40 on the 7th. Then drifted and chummed until dusk, then moved N of Robinson Crusoe Island for the night. Conditions were fair with S 10–15 knots wind and 1–2 meters swell. On the 8th, we decided to utilise the forecasted 3–4 days good weather, followed by strong winds, to make our visit to Alexander Selkirk Island, the farthest and most remote location of the expedition. Set off at about 10.00. Conditions remained fair with S 10–15 knots wind and 1–2 meters swell. On the 9th, arrived at the chumming location by first light, about 22 miles SW of Alexander Selkirk Island. Drifted N about 12 miles during the day. Conditions were fair with SW 10–15 knots wind and 1–2 meters swell. For shelter, relocated overnight N of the island. At first light on the 10th, set off toward a chumming location about 23 miles SE of Alexander Selkirk Island. Spent time with several feeding flocks of tubenoses en route. Arrived at chumming location about 17.00 and drifted until dark, then set off for the return to Robinson Crusoe Island to arrive before the worst of the bad weather. Progressed farther than anticipated by first light on the 11th, being about 36 miles off Robinson Crusoe Island. Conditions had deteriorated with SSE 25–30 knots wind and 2+ meters swell. Made headway at about 6–8 knots using sail. Proceeded to the W of the island and followed the coastline to Cumberland Bay. Dropped anchor at 15.30.



Robinson Crusoe Island AW



Alexander Selkirk Island AW

Wandering Albatross *Diomedea [exulans]*

Breeding The five taxa of this group breed biennially, each breeding cycle taking about a year, on islands mainly in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean.

Records Encountered at sea on all but one day within the archipelago, involving a total of 13 individuals. Not recorded in March 2013 by Shirihai *et al.* (2016).

Northern Royal Albatross *Diomedea sanfordi*

Breeding Biennially on islands off New Zealand, each breeding cycle taking about a year.

Records Encountered at sea on three of the five days within the archipelago, involving a total of six birds. Not recorded in March 2013 by Shirihai *et al.* (2016).

Black-browed Albatross *Thalassarche melanophrys*

Breeding Mainly on islands in higher latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–April.

Records The commonest of the albatrosses, encountered at sea on every day within the islands, involving a total of 36 individuals. Not recorded in March 2013 by Shirihai *et al.* (2016).

Video Most birds seen during the expedition were immature: here in 4C [click here](#)

Buller's / Pacific Albatross *Thalassarche bulleri* / sp.

Breeding Buller's Albatross breeds on Snares and Solander Islands, and around Stewart Island, New Zealand, January–September. Pacific Albatross breeds mainly in the Chatham Islands, New Zealand, November–July.

Records The only sighting away from the Humboldt Current was a single bird on the 9th off Alexander Selkirk Island. Not recorded in March 2013 by Shirihai *et al.* (2016).

Southern Giant Petrel *Macronectes giganteus*

Breeding Mainly on Subantarctic islands and the Antarctic mainland in the higher latitudes of the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–May.

Records The only sighting away from the Humboldt Current involved two birds on the 9th off Alexander Selkirk Island. Not recorded in March 2013 by Shirihai *et al.* (2016).

Video Immature feeding from chum bag [click here](#)



Northern Royal Albatross immature JR

Video This individual stayed with us for quite some time and occasionally flew around the yacht, with Alexander Selkirk Island giving the perfect backdrop. All birds were immatures. Southern Royal Albatross was not seen during the expedition [click here](#)

Northern Giant Petrel *Macronectes halli*

Breeding Circumpolar on Subantarctic islands at temperate latitudes, August–March.

Records Unlike Southern Giant Petrel, seen every at-sea day of the expedition, apart from the last day in Coquimbo Bay. Of the 45 birds seen within the archipelago, 35 were recorded in two days, on the last day off Alexander Selkirk Island and next day on the return journey to Robinson Crusoe Island. On 12th March 2013, Shirihai *et al.* (2016) attracted two birds to chum off Alexander Selkirk Island.

Cape Petrel *Daption capense*

Breeding Mainly on Subantarctic islands and the Antarctic mainland in the higher latitudes of the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, September–May.

Records Without exception, all birds logged within or just outside of the archipelago. Daily counts involved 1–3 individuals, with a total of 11 birds. Not recorded in March 2013 by Shirihai *et al.* (2016).

Juan Fernández Petrel *Pterodroma externa*

Breeding Alexander Selkirk Island, September–May.

Records About 850 were seen on the 8th as we sailed to Alexander Selkirk Island, and c. 200 as we sailed back to Robinson Crusoe Island. Return to colony on Alexander Selkirk Island involved about 5,000 birds on the 9th and the 10th. During 6th–12th March 2013, Shirihai *et al.* (2016) collectively counted c. 85,000 birds around Alexander Selkirk Island. They also found good numbers over an oceanic ridge, c. 35 miles E of Alexander Selkirk Island, which we skipped due to pending bad weather.

Video Returning to colony [click here](#) Feeding over chum [click here](#)

Kermadec Petrel *Pterodroma neglecta*

Breeding Nominate in the western and central Pacific, from Lord Howe Island in the W to the Pitcairn Islands in the E. Subspecies *P. n. juana* on Robinson Crusoe Island and Santa Clara Island, Juan Fernández archipelago, and Desventurados Islands. Breeding varies according to location, but taken together breeding is year round.

Records Encountered at sea on three of the five days within the archipelago, involving a total of five birds. Breeds locally with a maximum of 200 pairs (Brooke 2004). Birds in the Juan Fernández archipelago are the subspecies *P. n. juana* and are slightly larger than the nominate form. Shirihai *et al.* (2016) were surprised to encounter three birds in March 2013, outside of the local breeding season, to the SE and farther E of Alexander Selkirk Island.

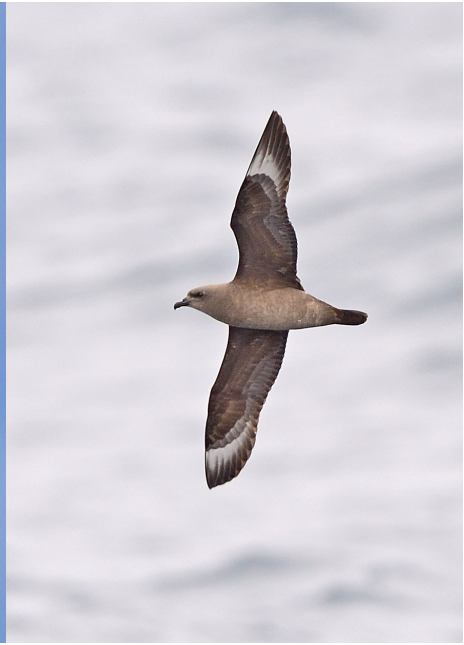
Murphy's Petrel *Pterodroma ultima*

Breeding Tropical Pacific Ocean, from the Gambier Islands in the W, to the Pitcairn Islands in the E, mainly June–December.

Records The sighting of three birds was unexpected and led to the recommendation that the species be added to the list of avifauna of S America (details in Flood *et al.* 2016). All three birds were photographed, with one on the 7th off Robinson Crusoe Island and two on the 9th off Alexander Selkirk Island. These are the first documented records within the Juan Fernández archipelago.



Juan Fernández Petrel KZ



Kermadec Petrel KZ



Three Murphy's Petrels AW(left) MD (centre and right)

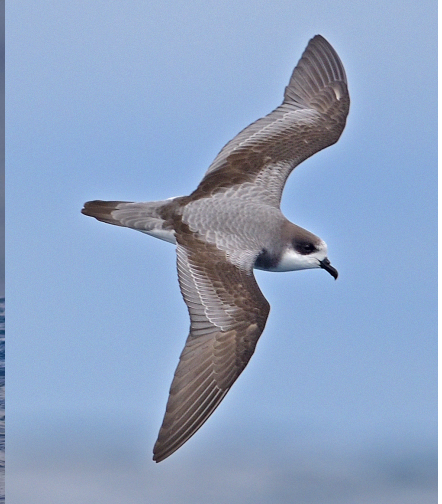
Stejneger's Petrel *Pterodroma longirostris*

Breeding Alexander Selkirk Island, Juan Fernández archipelago, November–April.

Records Only seen within the archipelago off Alexander Selkirk Island, indicating that the species does not forage extensively eastward from the breeding grounds toward or within the Humboldt Current. About 1,600 birds were logged, with about 500 on the 9th and about 1,000 on the 10th being the two return to colony evening counts made while drifting off Alexander Selkirk Island. In addition, 90 were seen en route to Alexander Selkirk Island on the 8th and 30 were seen on the return trip to Robinson Crusoe Island on the 11th. During 6th–13th March 2013, Shirihihi *et al.* (2016) collectively counted 1,925 birds. They also found 210 birds over an oceanic ridge c. 35 miles E of Alexander Selkirk Island, which we were unable to visit because of pending bad weather.

We noted that the timing of the evening return to colony was different from Juan Fernández Petrel. At 17.00, there was a steady stream of Stejneger's Petrel compared to very few Juan Fernández Petrel, by 18.00 the ratio was 10:1 Stejneger's Petrel to Juan Fernández Petrel, but by 20.00 the ratio was 15:1 Juan Fernández Petrel to Stejneger's Petrel. The same phenomenon was noted on both evenings while drifting off Alexander Selkirk Island: 22 miles SW on the 9th, and 23 miles SE on the 10th.

Video A very distinctive zippy mode of flight [click here](#)



Stejneger's Petrels KZ



De Fillipi's Petrels KZ

De Filippi's Petrel *Pterodroma defilippiana*

Breeding Santa Clara Island and islets off Robinson Crusoe Island, Juan Fernández archipelago, and Desventuradas Islands, June–January.

Records Seen on every day of the expedition, except for the last day in Coquimbo Bay. The highest concentrations were about 100 birds around Robinson Crusoe Island on the 7th, and 25 on the return from Alexander Selkirk Island as we approached Robinson Crusoe Island on the 11th. Only nine birds were seen while chumming off Alexander Selkirk Island on the 9th and 10th. Numbers we saw are consistent with the estimated few-hundred breeding pairs on Santa Clara Island and islets off Robinson Crusoe Island. Shirihai *et al.* (2016) were surprised to see this austral winter–spring breeder (May/June–December/January) in numbers during their expedition in March 2013. They saw a total of 604 birds, most during the crossings between the Humboldt Current and Robinson Crusoe Island, and the remainder during some of the chumming sessions off Alexander Selkirk Island. Given current knowledge, they were unable to make sense of these observations.

Video Versatile *Pterodroma* occurring in all oceanic habitats that we visited [click here](#)

Other Cookilaria petrels In 2013, Shirihai *et al.* (2016) also found two Cook's Petrels *Pterodroma cookii*, one off Robinson Crusoe Island on the 6th March, the other off Alexander Selkirk Island on the 12th March.

White-chinned Petrel *Procellaria aequinoctialis*

Breeding Mainly on islands in temperate latitudes in the S Atlantic, across the S Indian Ocean to New Zealand in the S Pacific Ocean, October–May.

Records Although far less common than in the Humboldt Current, this petrel was encountered quite regularly at sea, with sightings on four of the five days within the archipelago, involving ten birds. Not recorded in March 2013 by Shirihai *et al.* (2016).

Pink-footed Shearwater *Ardenna creatopus*

Breeding Mainly Santa Clara Island and Robinson Crusoe Island, Juan Fernández archipelago, and Mocha Island, Chile, November–May.

Records Very common off Robinson Crusoe Island, with about 2,000 on the 7th and next day about 4,000 as we travelled from Robinson Crusoe Island to Alexander Selkirk Island. Only five birds were seen on the subsequent two days around Alexander Selkirk Island. The rough crossing back to Robinson Crusoe Island restricted observation time, but about 500 were seen on the 11th as we approached Robinson Crusoe Island. Shirihai *et al.* (2016) reported a few around Robinson Crusoe Island and Alexander Selkirk Island in March 2013.

Sooty Shearwater *Ardenna griseus*

Breeding Mainly temperate and Subantarctic islands off New Zealand, far SW of S America, and the Falkland Islands, October–May.

Records While common in the Humboldt Current, this shearwater was seen only on three out of five days within the archipelago, involving just 19 birds. Shirihai *et al.* (2016) reported a few around Robinson Crusoe Island and Alexander Selkirk Island in March 2013.

Wilson's / Fuegian Storm-Petrel *Oceanites [oceanicus] chilensis*

Breeding Chilean Fjords, probably December–April.

Records Notable by its absence. Just one bird was seen off Robinson Crusoe Island on the 7th. Shirihai *et al.* (2016) also recorded just one in March 2013, off Alexander Selkirk Island.

White-bellied Storm-petrel *Fregetta grallaria*

Breeding Four subspecies currently recognised, with *F. g. segethi* breeding on Santa Clara Island, off Robinson Crusoe Island, Juan Fernández archipelago. The possibility of seasonal taxa in the Juan Fernández archipelago is hypothesised in Shirihai *et al.* (2016), since they saw some relatively large and chunky individuals plus Murphy (1936) found chicks of various ages one January.

Records The greatest concentration of birds was around Robinson Crusoe Island. We recorded the 20 mentioned above on the approach to Robinson Crusoe Island on the 6th, about 100 while chumming off Robinson Crusoe Island on the 7th, and an impressive estimated 600 attracted by the oil drip while sailing from Robinson Crusoe Island to Alexander Selkirk Island on the 8th (present until dark, at least half-way across). In March 2013, Shirihai *et al.* (2016) saw about 100 birds, 90+% of which were observed close to and E of Robinson Crusoe Island, up to 50 miles out. A few were observed between Robinson Crusoe Island and Alexander Selkirk Island. In May 1983, Bill Bourne (*in litt.*) found 24 off Robinson Crusoe Island but none off Alexander Selkirk Island. Evidently, birds were in greater numbers in May 2015 compared to March 2013, and apparently foraged farther W of Robinson Crusoe Island. Possibly, the fish-oil drip laid a trail that storm-petrels could not resist, and drew them farther W of Robinson Crusoe Island than reported by Shirihai *et al.* (2016).

Video Flying alongside the yacht [click here](#)

Video Following yacht attracted by oil dripper [click here](#)

Video Feeding off stern of drifting yacht [click here](#)



White-bellied Storm-petrels AW



White-bellied Storm-petrels KZ

Hundreds followed the yacht as we sailed from Rocinson Crusoe Island to Alexander Selkirk Island. We ran an oil trip continuously during the daylight hours. In total, we saw hundreds of birds around the yacht. The very best views were attained while drifting and chumming when birds came within a few feet of the yacht (see the video).

Other storm-petrels Shirihai *et al.* (2016) recorded 11 White-faced Storm-petrels *Pelagodroma marina* in chumming sessions off Robinson Crusoe Island and Alexander Selkirk Island in March 2013. They were seen among White-bellied Storm-petrels.

Chilean Skua *Stercorarius chilensis*

Breeding Along the coasts of Chile S of 37°S and the coasts of southern Argentina, November–March.

Records Birds were seen on four out of the five days within the archipelago, with a total of seven. Not recorded in March 2013 by Shirihai *et al.* (2016).

Parastic Jaeger *Stercorarius parasiticus*

Breeding Arctic tundra and adjacent habitats, May–September.

Records Two individuals were seen within the archipelago. Not recorded in March 2013 by Shirihai *et al.* (2016).

Other seabirds A Red-billed Tropicbird *Phaethon aethereus* was recorded by Shirihai *et al.* (2016) about 30 miles off Robinson Crusoe Island on the 6th March 2013.

Ashore on Robinson Crusoe Island (12th–13th)

Cumberland Bay



We spent the afternoon of the 12th and all day on the 13th on Robinson Crusoe Island, in the vicinity of San Juan Bautista, the town at Cumberland Bay. Most time was spent in the garden areas, especially adjacent to the library, but early morning on the 13th we were driven by local guide Marcelo Rossi high into the hills above Cumberland Bay

and escorted around a looping trail within the Parque Nacional Archipiélago de Juan Fernández. On the afternoon of the 13th, we enjoyed a short presentation by Oikonomos staff oikonomos.org Erin Hagen and Cristián López, followed by a trip to a small Pink-footed Shearwater colony near to the town. One adult bird was viewed in its burrow using a ‘burrowscope’. The archipelago has a cool, maritime climate and much of the vegetation was non-native. Land bird diversity was low, and limited to four native residents and three introduced species from the mainland. Interestingly, Black-browed Albatross was quite common along the coastline of Robinson Crusoe Island, and almost constantly in sight from Cumberland Bay, (typically 10–30 birds) along with small numbers of Northern Giant Petrels. This might relate to the inshore rock lobster and golden crab fishery.

Juan Fernández Hawk *Buteo polyosoma exsul*

Endemic subspecies of Variable Hawk *Buteo polyosoma*, limited to Alexander Selkirk Island but apparently now introduced to Robinson Crusoe Island. Quite abundant along coastal cliffs and headlands, seemingly with pairs every few hundred yards. Considered by some authorities worthy of full species status.

American Kestrel *Falco sparverius fernandensis*

Two or three present around San Juan Bautista, presumably the endemic subspecies. A single bird was observed on Alexander Selkirk Island.

Feral Pigeon *Columba livia domesticus*

Introduced. Perhaps 20 along the waterfront, ranging up into the hills above.

Juan Fernández Tit-Tyrant *Anairetes fernandezianus*

One was seen along the Alexander Selkirk trail at the start of the woodland. About 20 were heard in the forest high above Cumberland Bay, but few were seen. Shy, giving brief views and few photographic opportunities. On the basis of recent fieldwork by Oikinos staff, the total population is thought to be 2,500–3,000 individuals.



Juan Fernández Firecrown female (left) and male (right) JR

Juan Fernández Firecrown *Sephanoides fernandensis*

Commonly encountered in gardens of Cumberland Bay, favouring flowering ‘Cabbage Tree’ *Dendroseris litoralis*, an endemic perennial that we found planted in numerous private gardens as well as public parks. Gardens immediately adjacent to the Bibliotheque (public library) were particularly productive for this species. Over 30 birds were estimated. Similar to the Tit-Tyrant, the total population is estimated to be in the range of 2,500–3,000 individuals (Hahn *et al.* 2006).

Video Male [click here](#)

Video Female [click here](#)

Green-backed Firecrown *Sephanoides sephanoides*

Habitat preference similar to the previous firecrown, but seemingly more widespread in gardens around the town. Over 50 birds were estimated. Apparently not a migrant from the mainland, as often stated in literature, but a recent colonizer.

Austral Thrush *Turdus falcklandii magellanicus*

Common to abundant in woodland, especially within the National Park. Said to be responsible for dispersal of non-native invasive plants, such as the blackberry, throughout Robinson Crusoe Island and now Alexander Selkirk Island. Like the Green-backed Firecrown, it is thought to be a recent colonist. There are indications that this thrush might be the source of blood parasites now carried by the Tit-Tyrant (Martínez *et al.* 2014).

House Sparrow *Passer domesticus*

One was seen at the Bibliotheque on the 12th and heard along the Alexander Selkirk trail on the 13th. Introduced.

CETACEANS AND PINNIPEDS

The following marine mammals were logged.

Humpbacked Whale *Megaptera novaeangliae*

Two on the 7th.

Fin Whale *Balaenoptera physalus*

Two on the 5th.

Sperm Whale *Physeter microcephalus*

Three on the 16th, five on the 18th, and five more on the 19th.

Unidentified whales

A number of large blows were observed distantly.

Risso's Dolphin *Grampus griseus*

Six on the 20th off natural harbour, Herra Dura, Coquimbo.

Short-beaked Common Dolphin *Delphinus delphis*

Ten on the 10th and over 100 on the 16th.

Dusky Dolphin *Lagenorhynchus obscurus*

Four on the 7th.

Juan Fernández Fur-Seal *Arctocephalus philippii*

Near-endemic breeder, limited to Juan Fernández archipelago and the San Felix / San Ambrosio islands, with an estimated total world population of about 12,000 animals. We assumed individuals seen in local waters were this species. Some large rookeries were observed on Alexander Selkirk Island.

South American Fur-Seal *Arctocephalus australis*

We assumed that many if not all of the fur-seals seen close to the Chilean mainland were this species.



Diademed Sandpiper Plover *RF*

An irresistible pre expedition trip to the mountains yielded numerous specialities

ACKNOWLEDGEMENTS

We are grateful to Hadoram Shirihai for sharing his findings from the March 2013 expedition. Thanks to Oikonos staff Erin Hagen and Cristián López for an informative talk on conservation in the Juan Fernández archipelago and a visit to a Pink-footed Shearwater colony. Marcelo Rossi led our visit to the Parque Nacional Archipiélago de Juan Fernández. Andreas Schmidt of Vision Oceanica in Santiago, Chile, organised the substantial amount of fish oil that we required and partner Felipe Olea arranged the collection of the oil at San Antonio, Chile. Huge thanks to Didier and Sophie Wattrelot for their hospitality and unparalleled seamanship of their yacht Sauvage.

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John Ryan conserving energy



Dirty Dog Bob

Appendix: Alpha Codes

BBAL	Black-browed Albatross <i>Thalassarche melanophrys</i>
BUAL	Buller's / Pacific Albatross <i>Thalassarche bulleri</i> / sp.
CAPE	Cape Petrel <i>Daption capense</i>
CHAL	Chatham Albatross <i>Thalassarche eremite</i>
CHSK	Chilean Skua <i>Stercorarius chilensis</i>
DEPE	De Fillipi's Petrel <i>Pterodroma defilippiana</i>
ELSP	Elliott's Storm-petrel <i>Oceanites gracilis</i>
FR. sp.	<i>Fregetta</i> sp.
JA. sp.	Jaeger sp. <i>Stercorarius</i> sp.
JFPE	Juan Fernández Petrel <i>Pterodroma externa</i>
KEPE	Kermadec Petrel <i>Pterodroma neglecta</i>
LTJA	Long-tailed Jaeger <i>Stercorarius longicaudus</i>
MUPE	Murphy's Petrel <i>Pterodroma ultima</i>
NOGP	Northern Giant Petrel <i>Macronectes halli</i>
NRAL	Northern Royal Albatross <i>Diomedea sanfordi</i>
PAJA	Parastic Jaeger <i>Stercorarius parasiticus</i>
PEDP	Peruvian Diving Petrel <i>Pelecanoides garnotii</i>
PFSH	Pink-footed Shearwater <i>Ardenna creatopus</i>
PH. sp.	Phalarope sp. <i>Phalaropus</i> sp.
REPH	Red Phalarope <i>Phalaropus fulicarius</i>
RNPH	Red-necked Phalarope <i>Phalaropus lobatus</i>
SAAL	Salvin's Albatross <i>Thalassarche salvini</i>
SOGP	Southern Giant Petrel <i>Macronectes giganteus</i>
SOSH	Sooty Shearwater <i>Ardenna grisea</i>
SPSK	South Polar Skua <i>Stercorarius maccormici</i>
STGU	Swallow-tailed Gull <i>Creagrus furcatus</i>
STPE	Stejneger's Petrel <i>Pterodroma longirostris</i>
WAAL	Wandering Albatross <i>Diomedea [exulans]</i>
WBSP	White-bellied Storm-petrel <i>Fregetta grallaria</i>
WCPE	White-chinned Petrel <i>Procellaria aequinoctialis</i>
WEPE	Westland Petrel <i>Procellaria westlandica</i>
WISP	Wilson's / Fuegian Storm-Petrel <i>Oceanites [oceanicus] chilensis</i>



Chilean Skua 'CHSK' JR