Humboldt Current seabirding in Chile

In recent years, birders have come to realise the importance of the Humboldt Current for a myriad of albatrosses, petrels and other seabirds. In this article, the author of *The birds of Chile* discusses the what, how, where and when of seabirding in Chile. In a future *Neotropical Birding* we will publish an article about birding the Peruvian section of the Current.

Seabirds hold a special place in the psyche of birders. To some birders, seabirds cannot be bettered in terms of excitement. To others they are a dreadful reminder of seasickness, cold and discomfort. But at whichever end of the spectrum you stand or kneel, seabirds make a profound impact on the observer. Worldwide, there are many great places to go seabirding, whether from shore or on a dedicated pelagic trip, but perhaps no other section of the oceans has a higher density of seabirds than the Humboldt Current, which runs off the west coast of South America.

The Humboldt Current

The immense oceanic productivity of the Humboldt Current accounts for its unparalleled seabird abundance and impressive diversity. Consequently, a pelagic trip is high on the list for birders visiting Chile. Fortunately, pelagics are easy to arrange in central Chile at least, although prices have risen in recent years.

Around 34 species of tubenose (the exact number depends on one's preferred taxonomy) and a total of 36 penguins, cormorants, pelicans, boobies, phalaropes, gulls, terns and skuas have been found in the Humboldt Current off Chile⁴. A terrifying proportion of these seabirds are under some threat of global extinction—unfortunate testimony to the plunging fish stocks and direct seabird mortality ensuing from fishing operations. Two species are Critically Endangered, four Endangered, 10 Vulnerable, three Data Deficient and 11 Near Threatened.

Many species are resident, but fluctuate in abundance and vary in distribution with season and between years. Others appear to occur only seasonally. We still have much to learn about Humboldt Current seabird status and distribution.

In this article, I offer a personal and nonscientific account of the status of Chile's Humboldt Current seabirds, aiming to assist the observer who may want to visit Chile to see these superb birds. I complement this with advice on how, where and when to go seabirding. My goal is to facilitate great seabird experiences for birders from both near and afar.

Status of Chile's Humboldt Current seabirds

In the following accounts, seasons refer to the Southern Hemisphere calendar, e.g. spring is September–November.

Humboldt Penguin Spheniscus humboldti

Vulnerable. The common penguin in central and northern Chile, and should be seen on all pelagics departing Arica and most from central Chile. Humboldt Penguin is also easy to find from shore around Montemar/Reñaca north of Viña del Mar or in colonies such as at Algarrobo and Cachagua. On an Arica pelagic, you can book an extra hour to visit a breeding colony in a cave.

Magellanic Penguin Spheniscus magellanicus

Near Threatened. A common winter visitor to central Chile, some remaining into October during cold water years, so birders should not assume that every penguin they see is a Humboldt! The northern limit of the regular range of Magellanic Penguin remains unclear, although it perhaps only rarely reaches Arica.

Waved Albatross Phoebastria irrorata

Critically Endangered. This Equatorial breeder has been seen on Arica pelagics and was reported to me from Iquique by an experienced fisherman. The species's regular non-breeding range lies largely north of Chile, although it should be looked for in El Niño years. It may also be regular in warmer waters far offshore that are not accessible on a day-trip.

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Royal Albatross Diomedea epomophora

Vulnerable/Endangered. Both subspecies have been recorded off central Chile. 'Northern' Royal Albatross (*sanfordi*) is the central zone's most frequent 'great albatross' and can be common, with 4–6 on some trips (although none on odd, unlucky pelagics). 'Southern' Royal Albatross (*epomophora*) occurs, having been photographed off Valparaiso, but is much less frequent.

Wandering Albatross Diomedea exulans

Vulnerable. In this taxonomically controversial form, 'Antipodean' Albatross (*antipodensis*) has been found on pelagics off central Chile (and tracked by satellite to wintering grounds here¹¹); it is the taxon most likely to occur at this latitude. The status of the nominate 'Snowy' Albatross (*exulans*) is unclear; if this taxon occurs at all it is likely to be in winter.

Black-browed Albatross Thalassarche melanophris

Endangered. Abundant throughout Chilean waters in winter. There is a marked southward movement

Below, clockwise from left:

Humboldt Penguin Spheniscus humboldti (second from right) with Magellanic Penguins S. magellanicus, Puñuhuil, Chiloe Island, X Region, Chile, February 2008 (Alvaro Jaramillo)

Immature Wandering (Antipodean) Albatross *Diomedea exulans antipodensis* off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/james_lowen)

Immature Black-browed Albatross *Thalassarche melanophris* off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/james_lowen) of adults in late winter, leaving mainly immatures in central and northern Chile. In central Chile, Blackbrowed is the most common albatross after Salvin's in spring and summer (but Buller's Albatross *Thalassarche bulleri* is sometimes more numerous).

Buller's Albatross Thalassarche bulleri

Near Threatened. This species is more erratic in abundance than other mollymawks. On a spring pelagic off central Chile, it may be the most common albatross; at other times, only a couple of birds may be seen (or none in some years). In contrast to other albatrosses, adults predominate. Reports from central Chile of Yellow-nosed Albatross *T. chlororhynchos* and Grey-headed Albatross *T. chrysostoma* are almost certainly misidentified Buller's. Grey-headed has not yet been documented in central Chile but might possibly occur, albeit only very rarely and in winter.

White-capped Albatross *Thalassarche cauta* Near Threatened. Photographed once off Central Chile (Enrique Couve unpublished data), this species is a vagrant to Chile and should not be expected on a pelagic.

Salvin's Albatross *Thalassarche salvini* Vulnerable. Between spring and autumn, this is

usually the commonest

'Northern' Royal Albatross Diomedea epomophora sanfordi off Valparaiso, V Region, Chile, April 2008 (Fabrice Schmitt/Birding in Peru)







Below, from top to bottom:

Buller's Albatross *Thalassarche bulleri* off Valparaiso, V Region, Chile, November 2006 (Pablo Cáceres)

Chatham Albatross *Thalassarche eremita* off Valparaiso, V Region, Chile, January 2007 (Fabrice Schmitt/Birding in Peru)

The white morph of Southern Giant Petrel Macronectes giganteus (left), colloquially called 'white nelly', off Valparaiso, V Region, Chile, September 2008 (Pablo Cáceres) and adult Northern Giant Petrel Macronectes halli (right) in the Drake Passage south of Cape Horn, December 2007 (James C. Lowen; www.pbase.com/james_lowen)





albatross in central and northern Chile. Several hundred may be seen on a single outing; often 20–30 will be visible at any one time. All ages occur, but adults are much less frequent.

Chatham Albatross Thalassarche eremita

Critically Endangered. In recent years birders scrutinising Salvin's Albatrosses have turned up the odd Chatham Albatross. The species is now being found on perhaps one-fifth of trips off central Chile during spring and summer. More may be found once our understanding of identification criteria for young immatures improves (see Steve Howell's article on pp. 27–39 of this issue).

Southern Giant Petrel Macronectes giganteus

Near Threatened. Common all year and abundant in winter, when often observed from shore. From spring to autumn, immature birds predominate in central and northern Chile.

Northern Giant Petrel Macronectes halli

Near Threatened. Resolution of identification issues over the past decade has clarified this species' status in Chile. It is now apparent that this species is often more common than Southern Giant Petrel off central Chile in spring, but the duo's relative abundance varies between years and seasons.

Southern Fulmar Fulmarus glacialoides

Abundant in winter, when often seen from shore. Between spring and autumn, numbers vary in





Below: Salvin's Albatrosses *Thalassarche salvini* off Valparaiso, V Region, Chile, April 2008. From left to right: adult (Pablo Cáceres); adult feeding on chum (Pablo Cáceres); and immature in flight (Fabrice Schmitt/Birding in Peru)





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relation to water temperature. More likely to be seen in October than November, when most birds have headed south.

Cape Petrel Daption capense

Like Southern Fulmar, this species is much more common in winter, when often seen from shore, although a few usually hang on in central and northern Chile throughout the warmer months.

Cook's Petrel Pterodroma cookii

Endangered. The Chilean distribution of this species is far from clear, in part due to confusion with Masatierra Petrel *Pterodroma defilippiana*. Cook's Petrel appears to range further north and to stay further offshore. Although reported by highly experienced observers, it is unlikely to be seen from a short pelagic. Photographs would help clarify its status.

Masatierra Petrel Pterodroma defilippiana

Vulnerable. Breeds from winter–spring on the Juan Fernández and Desventuradas Islands. Apparently present in the Humboldt Current all year, the main population shifts north and towards the coast after breeding. Although by no means guaranteed, this is the most regular *Pterodroma* found on a spring pelagic from central Chile. A good way of drawing them to your vessel is to chum for a long time in a single location far from shore.

Stejneger's Petrel Pterodroma longirostris

Vulnerable. Stejneger's Petrel breeds from spring–summer on Alejandro Selkirk, the outermost of the Juan Fernández Islands. A trans-Equatorial migrant, it spends the non-breeding season in the north Pacific. This *Pterodroma* does not venture as close to shore as Masatierra Petrel. In all, it is very unlikely that birders will see this species on a central Chile pelagic; the best chance might be in late summer or autumn. Moreover, identification is not straightforward; in strong light, Masatierra may appear to have a dark hood, prompting thoughts of Stejneger's.

Juan Fernandez Petrel Pterodroma externa

Vulnerable. This long-winged *Pterodroma* is an abundant breeder on the outermost Juan Fernández Island (Alejandro Selkirk). Like Stejneger's Petrel, Juan Fernandez Petrel spends the non-breeding period further north, in this case in the Eastern Tropical Pacific. In some years this petrel may be found on spring pelagics off central Chile, becoming regular in late summer and autumn (February–April).

Dove Prion Pachyptila desolata

A winter visitor. Numbers in central and northern Chile vary between years in relation to food availability further south. I have found mummified remains on the beach at Arica, which may suggest that good numbers make it north in some years.

Slender-billed Prion Pachyptila belcheri

A winter visitor, this is the commoner prion in Chile. On windy winter days, it can be seen on seawatches, although confident identification of distant prions to species takes some doing. Slender-billed Prions stay well south of Chile between spring and autumn, but the odd October pelagic may come across a bird or two.

White-chinned Petrel Procellaria aequinoctialis

Vulnerable. Common, particularly in winter. This species is typically more frequent than the congeneric Westland Petrel *Procellaria westlandica*, except off Arica where smaller numbers of the two *Pro-cellaria* are present and numbers roughly equal.

Westland Petrel Procellaria westlandica

Vulnerable. Previously regarded as a vagrant⁶, this species is now known to be regular and common off Chile¹. Pelagics off central Chile in spring or summer can expect to encounter Westland Petrel, with sometimes more than 20 birds seen. As the species ranges north to Peru, it can be found regularly during pelagics off Arica.

Buller's Shearwater Puffinus bulleri

Vulnerable. Most abundant from February–April, between the species's breeding season and its migration northwards to California (US). During this period, the species may be encountered from Valparaiso north to Arica, but it is unlikely to be seen during a spring pelagic.

Sooty Shearwater Puffinus griseus

Near Threatened. Abundant, but numbers vary seasonally. A recent survey found that four million pairs breed on the Guafo Islands, south of Chiloé—probably the largest seabird colony in the world⁷. Most are in the Northern Hemisphere from May–September, although some remain in Chilean waters. In October and November huge numbers stream south in active migration, often only a few nautical miles from shore.

Greater Shearwater Puffinus gravis

This Atlantic species has probably been seen fewer than ten times on central Chilean pelagics during the spring and summer and should still be considered a vagrant.

Pink-footed Shearwater Puffinus creatopus

Vulnerable. This shearwater breeds only on islands off Chile, namely Robinson Crusoe and Santa Clara in the Juan Fernández group and Mocha Island in IX Region. It is abundant from central to northern Chile and is usually one of the most common tubenoses on a spring or summer pelagic. Numbers vary with season; most birds are in the North Pacific from May–August, although some always remain off Chile.

Flesh-footed Shearwater Puffinus carneipes

Flesh-footed Shearwater is a vagrant to Chile, so a dusky shearwater with a pale-based bill is much more likely to be the rare dark form of the Pinkfooted Shearwater. This variant has not yet been described in the literature, but has been observed on various occasions on pelagics off California (pers. obs., D. Shearwater pers. comm.). Variant Pinkfooted Shearwaters are less dark chocolate-brown than Flesh-footed, and the bill is neither as boldly coloured nor as crisply patterned. However, what appears to be a true Flesh-footed Shearwater has been photographed in the Juan Fernández Islands (Enrique Couve unpublished data), so it is worth looking for the species in the Humboldt Current.

Manx Shearwater Puffinus puffinus

Another Atlantic rarity, Manx Shearwaters are observed almost annually off central Chile; I have also photographed one off Arica so the species may occur anywhere in Chilean waters. My personal opinion is that Manx Shearwater is not only regular, but overlooked and becoming more common. I have even observed it when seawatching from Punta de Tralca, north of San Antonio in V Region. In spring and summer, at least, it should be considered more likely than Little Shearwater *Puffinus assimilis*. Along the Pacific coast of the US, there are now more than 100 records of Manx Shearwaters each year between California and Oregon; in 2006 a juvenile was photographed in fall/autumn, hinting that the species may now breed in the North Pacific.

Little Shearwater Puffinus assimilis

Very little known in Chile, but likely to be regular in winter. All Chilean records and specimens (from Chiloé Island⁵) have been during this season, so the map in *The birds of Chile*⁴ is erroneous in depicting its presence in summer. Although I have not seen Little Shearwater during pelagics, David Beadle, Peter Burke and I were able to study several during two bouts of winter seawatching at Punta de Tralca in V Region.

White-bellied Storm Petrel Fregetta grallaria

Breeding on the Juan Fernández and Desventuradas Islands, the Chilean subspecies *segethi* shifts north and approaches the coast during the non-breeding season. Although unlikely to be found off central Chile, pelagics venturing into deep water in the north (e.g. from Antofagasta to Iquique) may offer the best shot at finding this species. Raúl Herrera, the pelagic operator in Arica, recently photographed one inside Arica harbour: an amazing record that is unlikely to be repeated.

Wilson's Storm Petrel Oceanites oceanicus chilensis

A common or abundant resident. The default storm petrel in central Chile, but far less common than Elliot's Storm Petrel *Oceanites gracilis* in Arica. The subspecies found in Chile, 'Fuegian



When the 'chum' is dropped into the sea, a feeding frenzy often results. Left: Preparing the 'chum' on a Chilean pelagic (James C. Lowen; www.pbase.com/james_lowen). Centre: Salvin's Albatrosses *Thalassarche salvini* and Pink-footed Shearwaters *Puffinus creatopus*. Right: Pink-footed Shearwaters. Both off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/james_lowen)

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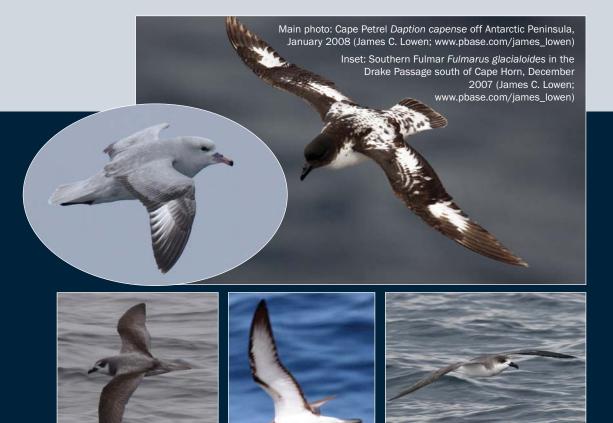
Storm Petrel' (*chilensis*), differs in several ways from the nominate *oceanicus*. Unlike *oceanicus*, *chilensis* is not a trans-equatorial migrant; the preferred pelagic habitats of the two taxa also differ⁹. *Chilensis* is smaller than *oceanicus* and often shows a pale underwing panel (like Elliot's); confusingly, some *chilensis* also show very small patches of white on the vent, the significance of which is unclear. Species limits in these storm petrels warrant study. Various lines of evidence suggest that *chilensis* may be more closely related to Elliot's than to *oceanicus* Wilson's, and that it may be a separate species from both.

Elliot's Storm Petrel Oceanites gracilis

Data Deficient. The common storm petrel off Arica, Elliot's Storm Petrel is sometimes seen from shore. Curiously, when seen together with Wilson's (Fuegian) Storm Petrel off Arica, Wilson's is bolder and approaches the boat more closely. Off central Chile, Elliot's is greatly outnumbered by Wilson's during spring at least, but a combination of luck and careful perusal may reveal its presence. The nominate subspecies (rather than *galapagoensis* from the Galapagos) occurs in Chile. Amazingly, the breeding grounds of this numerous storm petrel are largely unknown, the only site thus far discovered being Chungungo Island in IV Region, and even then only four nests have been located³.

Wedge-rumped Storm Petrel Oceanodroma tethys

This species is rare off Arica, but should be sought during years when storm petrels are abundant. Wedge-rumped Storm Petrel associates readily with Elliot's Storm Petrels, and the two species may rest together in flocks.



Three globally threatened *Pterodroma* petrels. From left to right: Masatierra Petrel *P. defilippiana* off Valparaiso, V Region, Chile, November 2006 (Pablo Cáceres); Stejneger's Petrel *P. longirostris* off Robinson Crusoe, Juan Fernández Islands, Chile, November 2005 (Alvaro Jaramillo); and Juan Fernández Petrel *P. externa* off Valparaiso, V Region, Chile, March 2008 (Fabrice Schmitt/Birding in Peru)

Markham's Storm Petrel Oceanodroma markhami

Data Deficient. This species occurs off Arica but, infuriatingly, varies considerably in abundance. In some springs, it is common and occurs relatively close inshore; at other times it is simply absent. To see it, the trick may be to plan for a long day, heading to deeper water should the species not be found within the first 10 nautical miles or so. At the base of El Morro, the big rocky hill on the south side of Arica, wings of Markham's Storm Petrels are sometimes found in considerable numbers. Perhaps Peregrine Falcons Falco peregrinus forage offshore for this species? Markham's Storm Petrel should be considered very rare off central Chile; I have only seen it once off Valparaiso. While a few nesting birds have been found in Peru, ornithologists have still not located the lion's share of the breeding population¹⁰. Some conceivably breed in inland deserts: many recent fledglings have been found near Iquique² and I once found a recently fledged juvenile road killed on the Panamerican highway where it crosses the río Lluta, just north of Arica.

Westland Petrel *Procellaria* westlandica off Valparaiso, V Region, Chile, March 2007 (Fabrice Schmitt/Birding in Peru)

Ringed Storm Petrel Oceanodroma hornbyi

Data Deficient. The breeding grounds of this storm petrel are unknown, but conjectured to be in Chile^{2,10}. Off the Chilean coast, the species is rare and difficult to see. Chances of encountering the species seem to be greater in the deep, cold water that lies between Antofagasta and Iquique, rather than off Arica, where I have yet to find one.

Peruvian Diving Petrel Pelecanoides garnoti

Endangered. Common in central Chile and abundant further north, including off Arica. The species is typically seen early in a pelagic, only a few nautical miles from shore. In Arica diving petrels may also be seen on seawatches, with the Alacrán Peninsula being as good an observation point as any.



White-chinned Petrel Procellaria aequinoctialis off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/ james_lowen)

Below (upper three images): Three *Puffinus* shearwaters. From left to right: Buller's Shearwater *P. bulleri* off Valparaiso, V Region, Chile, February 2007 (Fabrice Schmitt/Birding in Peru); Sooty Shearwater *P. griseus* off Quintero, V Region, Chile, June 2007 (Pablo Cáceres); and Greater Shearwater *P. gravis* off Tierra del Fuego, Argentina, March 2007 (James C. Lowen; www.pbase.com/james_lowen)







Pink-footed Shearwaters *Puffinus creatopus*. Left: a typical bird off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/james_lowen). Right: a group including a rare dark variant that might provoke confusion with Flesh-footed Shearwater *P. carneipes*, Monterey Bay, California, USA, September 2007 (Alvaro Jaramillo)







Peruvian Diving Petrel *Pelecanoides garnoti* off Arica, XV Region, Chile, September 2008 (Ignacio Azócar; www.chileaves.com)

Red-billed Tropicbird Phaethon aethereus

This tropicbird has bred on Chañarral Island in northern Chile and was recently photographed on a Valparaiso pelagic. Warm water years offer the best chance of finding the species. Although not usually observed during pelagics from Arica, Raúl Herrera reports that birds are present 40 nautical miles offshore.

Brown Pelican Pelecanus occidentalis

Subsequent to the publication of *The birds of Chile*⁴ (unfortunately), this species has been discovered in Arica, where it occurs in small numbers, particularly around the harbour. The separation of Brown Pelican from the congeneric Peruvian Pelican *Pelecanus thagus* is not easy; size is the most important feature although there are also differences in plumage, soft part coloration and size, and foraging strategy (Brown dives from a height whereas Peruvian only performs shallow dives or feeds on the surface).

Peruvian Pelican Pelecanus thagus

Near Threatened. This pelican is abundant and easy to see anywhere along the central and northern coast.

Blue-footed Booby Sula nebouxii

A vagrant to Arica, with records exclusively of immatures, and perhaps occuring only in El Niño years. The species has been seen in the harbour at Arica and at the beach adjacent to the mouth of the río Lluta.

Peruvian Booby Sula variegata

Common to extremely abundant, depending on local feeding conditions, and can be expected on any pelagic off central or northern Chile.

Neotropic Cormorant *Phalacrocorax* brasilianus

Abundant in Arica but less so in central Chile. Does not occur offshore, so look for it around ports in particular.

Red-legged Cormorant Phalacrocorax gaimardi

Near Threatened. This species' distribution is widespread but patchy. Found close to shore, it is most easily seen when returning to ports such as Arica or Valparaiso (where some breed at Montemar/Reñaca). Some pelagics fail to record this cormorant.

Guanay Cormorant Phalacrocorax bougainvillii

Near Threatened. Flocks of low-flying cormorants far out to sea are usually this species as it is the most pelagic of Chile's *Phalacrocorax*. Sometimes abundant off Arica when food is plentiful, the species is also always seen on Valparaiso pelagics, albeit in varying numbers.

Red-necked Phalarope Phalaropus lobatus

The status of this phalarope in Chile is unclear, but it is either very rare or a vagrant. Arica offers the best chance, but photographs are necessary to document its presence. Reports from Valparaiso may relate to misidentifications.

Red Phalarope Phalaropus fulicarius

Common in spring and readily seen migrating southward off both Arica and central Chile. The species is decidedly less common in summer, suggesting that the bulk of the population spends its non-breeding season south of Valparaiso. Northbound migration is poorly known as fewer pelagics run in the autumn, but it is likely that good numbers move north in March–April.

Chilean Skua Stercorarius chilensis

A common bird, this is the only large skua that one should expect on a Chilean pelagic. The species varies enormously in appearance; in my view, most reports of South Polar Skua *Stercorarius maccormicki* and Brown Skua *S. antarcticus* from central and northern Chile actually relate to dark Chilean Skuas.

South Polar Skua Stercorarius maccormicki

This very rare migrant has been photographed at least once off central Chile. Its status remains uncertain, but it clearly occurs and—while it should not be expected on a Chilean pelagic should particularly be looked for in autumn.

Pomarine Jaeger Stercorarius pomarinus

In the non-breeding season, this jaeger can be numerous in Arica; it would be interesting to determine whether its varying abundance correlates with the proximity of fishing fleets. Rare off central Chile and should not be expected on a pelagic there.

Parasitic Jaeger Stercorarius parasiticus

The default jaeger in central Chile, but often missed on spring pelagics as numbers are low in October–November and only appear to increase in December. In the north, Parasitic Jaeger is usually outnumbered by Pomarine.

Long-tailed Jaeger Stercorarius longicaudus

This jaeger largely spends the non-breeding season south of Valparaiso. It can be seen far from shore during pelagics off central Chile and Arica during its southward migration in October–November, birds often coinciding with a heavy passage of Arctic Terns *Sterna paradisea*. The jaeger presumably also occurs on the return northward migration in March–April, but its status at this season is poorly understood.

Swallow-tailed Gull Creagrus furcatus

Previously considered a vagrant, this pelagic gull appears to be regular in Chile, albeit far from shore. Although seen during pelagics off both central Chile and Arica (where more regular), most trips do not reach the distant waters that this gull prefers.

Sabine's Gull Xema sabini

Infrequent and irregular off both central Chile and Arica. This gull's status is poorly understood, perhaps because its migratory route lies further offshore than the itinerary of most pelagics.

Grey Gull Leucophaeus modestus

Widespread and common from central Chile to Arica, and abundant in the north. In central Chile, this gull's abundance varies both seasonally and between years.

Franklin's Gull Leucophaeus pipixcan

An abundant migrant off Arica in November, thousands can be seen streaming south. Franklin's Gulls arrive a little later in central Chile but, once there, are one of the most abundant gulls seen on pelagics. The similar Laughing Gull *Leucophaeus atricilla* is a vagrant to Chile: records are all coastal rather than offshore, and Arica harbour is a good spot to search.

Belcher's Gull Larus belcheri

Common in northern Chile, breeding just south of Arica and regularly foraging far offshore. Belcher's Gull is a vagrant to central Chile, where it is perhaps most likely to occur in winter. Most reports here actually refer to second-year Kelp Gulls *Larus dominicanus*.

Kelp Gull Larus dominicanus

Abundant and widespread, even well offshore, particularly in central Chile. Uncommon in Arica, where outnumbered by other gulls.

Peruvian Tern Sternula lorata

Endangered. Very rare and apparently declining, this small tern is very difficult to find—perhaps because it may be pelagic outside the breeding season. I have never seen one from shore at Arica, despite finding it many times 10–15 nautical miles offshore on a pelagic there. Intriguing records of the congeneric Least Tern *Sternula antillarum* offshore in Mexico⁸ suggest that this species is at least partly pelagic; it is conceivable that Peruvian Tern may have similar habits, and various observations suggest that this is the case.

Inca Tern Larosterna inca

Near Threatened. This fantastic bird is regular from pelagics in both central and northern Chile. Gull-like in behaviour, this species forages well offshore. Many breed in Arica harbour, so a quick detour on one's return to port should net amazing views of an incredible seabird: look for it by the huge tyres used as bumpers in the industrial section of the port.

Common Tern Sterna hirundo

Uncommon in central and northern Chile. Unlike Arctic Tern, Common Terns roost onshore. Like Arctic, however, Commons forage and migrate far offshore, so observers should not assume that a migrant tern many miles from the coast is an Arctic. In Chile, Common Terns have black bills, so a red-billed tern here is either an Arctic or South American Tern *Sterna hirundinacea*. Moreover, unlike Arctic Tern, Common Terns attain non-breeding plumage by October–November, exhibiting bold dark patagial (or carpal) bars and moulting wings.

Arctic Tern Sterna paradisaea

A common southbound migrant off central Chile and Arica in October–November. The timing of the northbound return migration is unclear, but is presumably March–April. Food availability may

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dictate how far offshore the species migrates, as there is variation between years. Accordingly, numbers vary between years. In October–November, adult Arctic Terns are still in breeding plumage, albeit worn and patchy, with broken tail streamers and often some white speckling on the forehead, but have unmoulted flight feathers and some red color in the bill.

South American Tern Sterna hirundinacea

Common to abundant in central Chile, particularly in winter. It is less common in Arica, yet South American Tern can still be expected in small numbers. Although more coastal than Arctic or Common Tern, the species can occur many miles offshore. In spring and summer, the only South American Terns present in north or central Chile are either immatures or what appear to be adults in non-breeding plumage; breeding plumage adults are absent. South American Tern exhibits variation in plumage and bill colour so identification of the *Sterna* trio is difficult, to say the least, particularly on a small boat in the swell. I suggest taking notes and photos with which to bamboozle fellow birders.

Elegant Tern Thalasseus elegans

Near Threatened. This tern can be very common a few miles from shore, so look for it when leaving or returning to port in central or northern Chile from October–March. The species breeds in the Northern Hemisphere, and few remain in Chile between April and September.



Left: Franklin's Gull *Leucophaeus pipixcan* off Quintero, V Region, Chile, November 2006 (James C. Lowen; www.pbase.com/james_lowen)

Below, top row, from left to right (all by Alvaro Jaramillo): Juvenile Brown Pelican *Pelecanus occidentalis*, Arica harbour, XV Region, Chile, December 2007; Whitebellied Storm Petrel *Fregetta grallaria* off Robinson Crusoe, Juan Fernández Islands, November 2005; and Wilson's (Fuegian) Storm Petrel *Oceanites oceanicus chilensis* off Arica, XV Region, Chile, November 2006

Below, bottom row: (left) Peruvian Booby *Sula variegata* off Valparaiso, V Region, February 2007 (Pablo Cáceres); (right) adult Peruvian Pelican *Pelecanus thagus* off Valparaiso, V Region, Chile, November 2006 (Alvaro Jaramillo)











Seabirding options: seawatching from shore

Seabirding in Chile can be as easy as sitting on the coast and watching what goes by. Almost any promontory at any season can be successful, so check the map, pick somewhere that looks good—then go for it! Moreover, by choosing a new or less well-known site, birders can contribute to our understanding of Humboldt Current seabird distribution and seasonality.

Below, from top to bottom:

The gorgeous Inca Tern *Larosterna inca*, Valparaiso, V Region, Chile, September 2006 (Pablo Cáceres)

Common Tern Sterna hirundo, Rincón de Cobo, Buenos Aires, Argentina, February 2008 (James C. Lowen; www.pbase.com/james_lowen)

Elegant Tern *Thalasseus elegans*, mouth of the río Maipo, V Region, Chile, March 2008 (Pablo Cáceres)







Notwithstanding this suggestion to explore, it is worth mentioning one particular key seawatching site, due to its proximity to the Chilean capital of Santiago: Punta de Tralca in V Region. Punta de Tralca owes its reputation to two factors. First, it lies just north of San Antonio, one of Chile's busiest ports. Many fishing vessels returning to port are often followed by seabirds, particularly in winter. Second, and more significantly, the San Antonio submarine canyon lies immediately south of Punta de Tralca. As at the Monterey Canyon in California, deep water comes very close to shore, and upwellings produce an incredibly productive zone of cold, nutrientrich water.

Concerted seawatching from this spot alone will surely yield many surprises. After one winter storm, Peter Burke spotted a Sooty Tern *Sterna fuscata*, enabling David Beadle and I to savour this pelagic vagrant. Other personal highlights from just a few hours at Puntra de Tralca include several Little Shearwater, Manx Shearwater and Slender-billed Prion, with a fine supporting cast of thousands of Pink-footed and Sooty Shearwater,

Below, from top to bottom:

The congeneric Red-legged Cormorant *Phalacrocorax gaimardi* (left), Valparaiso, V Region, Chile, August 2008 and Guanay Cormorant *P. bougainvillii* (right), Valparaiso, V Region, Chile September 2008 (Pablo Cáceres)

Chilean Skua Stercorarius chilensis at Ushuaia, Argentina, November 2007 (James C. Lowen; www.pbase.com/james_lowen)





Southern Fulmar, Cape Petrel and Black-browed Albatross. Punta de Tralca is worth a try in any season, but seabird abundance close to shore is highest in winter, and spring is also good.

Seabirding options: pelagics

The other way to see Humboldt Current seabirds is to take a pelagic trip. In central Chile, pelagics are best organised from the ports of Valparaiso or Quintero, both within a two-hour drive of Santiago. In the far north, just shy of the Peruvian border, Arica stands out in terms of practicality, although the area between Antofagasta and Iquique may actually be better, as deep, nutrientrich waters come closer to shore.

Many species can be seen on a standard sixhour pelagic; surprisingly perhaps, there does not seem to be much benefit—in terms of diversity or numbers—in heading out all day to get as far from shore as possible. Heading 10–20 nautical miles out is sufficient, and most pelagics reach 15 nautical miles or so offshore; boats rarely exceed 6–8 knots in speed. The key is to go early, when the sun is behind you and the wind minimal; in spring, strong south-west winds can build by early afternoon.

The classic pelagic from Valparaiso or Quintero kicks off with a search for Peruvian Diving Petrel and penguins for the first hour. A few nautical miles farther out, Sooty Shearwaters appear, then Pink-footed Shearwaters and other tubenoses. Eventually someone will call out an albatross. Once albatross numbers increase noticeably, it is time to 'chum' and watch the water around the boat ply with an enormous assortment of seabirds. There is usually enough time to chum three times before returning to port. An abundance of chum is essential; the key component is oily fish livers but these are not always easy to come by.

A pelagic off northern Chile differs markedly from one off the central coast. In the north, seabird abundance is more variable and diversity lower. In addition, the weather tends to be better, the sea calmer and the boats smaller. The stars of Arica's pelagic show are storm petrels, but often only Elliot's Storm Petrel is present in good numbers. In some years, large numbers of Markham's Storm Petrel venture close to shore; in other years, they are absent. I have yet to see Hornby's Storm Petrel off Arica; it may be outside the reach of a six-hour trip, but I have seen it off Antofagasta where deep water is found closer to shore. Jaegers are also usually more common in Arica than in central Chile, although their relative abundance varies considerably.

Although the best area for pelagic birding in the north is likely to be the deep water between Antofagasta and Iquique, few birders venture out on pelagics here, perhaps because no local skipper has risen to prominence for their experience conducting pelagic trips. It would be useful to share information on good skippers with safe boats.

For cetacean enthusiasts, the north is better than central Chile, where the only species I have seen from a pelagic is Dusky Dolphin Lagenorhynchus obscurus (although Sperm Whale *Physeter macrocephalus* is possible). In the north, cetacean diversity is higher. Risso's Dolphin Grampus griseus is relatively common, as are both inshore and offshore forms of Bottlenose Dolphin Tursiops truncatus. I have also seen a large rorqual that I identified as Sei Whale Balaenoptera borealis. The sea from Valparaiso north to Iquique may be much better for cetaceans than the coast off the two ports birders usually frequent, but the status of many whales and dolphins remains poorly known. A local speciality, Chilean Dolphin *Cephalorhynchus eutropia*, may be best found by seawatching from rocky headlands near Valparaiso. Another coastal mammal, Marine Otter Lontra felina, can be found at Punta de Tralca and along the rocky coast south of Arica.

Organising a pelagic in Chile

Pelagics should be organised in advance, with the price and duration agreed with the captain. The skipper will need passenger names and passport numbers to pass to the port authorities. Given rising costs of living and diesel, truly cheap pelagics from Valparaiso, Quintero or Arica are a thing of the past.

Boats are rented by the hour, and a six-hour pelagic will probably cost several hundred US dollars. Arica is cheaper than central Chile. It would be a disservice for me to cite a standard hourly rate, as this could stifle the ability of boat operators to shift their prices (e.g. to cover rising costs) without birders assuming that they are being overcharged. In my experience, pricing has been fair, and nobody is getting rich doing pelagics off Chile! Please tip deckhands who diligently dice the chum; by giving cash directly to the local people who facilitate your birding, you can watch how folks begin to appreciate nature and the economic benefits available to those who help conserve it.

SKIPPERS FOR PELAGICS

The top two skippers in Valparaiso and Arica are, respectively, Franco Romo and Raúl Herrera. Both the pelagic down to a fine art; Franco has captained well over 100 trips, giving him a great eye for spotting the goodies and working the weather. Experience counts; I do not advise taking a pelagic with a skipper unaccustomed to going offshore (as is the case with many boats in Valparaiso) simply to save money. Choose the right people and you will not be disappointed. You may deal with Franco and Raúl directly, in Spanish, or make arrangements through a local operator (see below). Franco runs Pelagico Aventura (Tel: +56 32 2258092;

www.adventurepelagic.cl); Raúl runs Mata Rangi Tours (Tel: +56 9 6825005; e-mail: info@turismomarino.com; www.turismomarino.com).

THREE LOCAL OPERATORS THAT ARRANGE PELAGICS

Rodrigo Tapia and Rodrigo Reyes of Humboldt Pelagics run scheduled monthly trips (Tel: +56 9 96175304; e-mail: info@humboldtpelagics.com; www.humboldtpelagics.com).

Alejandro Simeone guides for Hualamo Nature Tours (Tel: +56 9 7440631; e-mail: asimeone@hualamo.com or a.simeone@uandresbello.edu; www.hualamo.com/tour_pelagic_trip.php).

Gonzalo Gonzalez manages Birding Chile (Tel: +56 2 2479100; e-mail: info@birdingchile.com; www.birdingchile.com/humboldt.htm).

INTERNATIONAL TOUR COMPANIES

International tour operators that run birding tours in Chile also offer pelagics as part of the package—and if they don't, they should!

To reduce costs, independent travelers should consider forming a group. Foreign birders might also get in touch with Chilean birders who are always looking to share a boat: try the 'obschile' yahoo! group, a vibrant internet forum that has brought together the Chilean birding community and regularly arranges pelagics. For contact details of local operators and recommended skippers, see the box.

ACKNOWLEDGMENTS

Ignacio Azócar, Pablo Cáceres, Consuelo Castilla, Fernando Díaz Aguirre, James Lowen, Fabrice Schmitt and Rinaldo Verdi B. kindly volunteered the use of their photos to illustrate this article.

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PIPIT PHOTOGRAPHS PLEASE!

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In Neotropical Birding 3, we asked for photographs of the seven South American pipits Anthus to illustrate a forthcoming Identification Workshop. We have had a great response from members, for which thanks! However, we are still looking for additional images of the following taxa: Ochre-breasted Pipit Anthus nattereri, Hellmayr's Pipit of the subspecies A. hellmayri brasilianus from Brazil, Paramo Pipit A. bogotensis, and Chaco Pipit A. chacoensis. If you can help, please email low-resolution images, in the first instance, to neotropicalbirding@ neotropicalbirdclub.org. Thanks!