

Madeira notes:

Zino's Petrel at sea off Madeira, 27 April 2004

I birded with a small American group around southern Portugal 15-25 April, and we went to Madeira for three days afterward. It was a most pleasant visit, my second in April. This is not at all the best time for seabirding, as readers to this website already know. However, the trip was planned with some forethought in this regard. Over the past 11 years, we have honed the strategy for seeing Bermuda Petrels (Cahows) at sea near their breeding areas. Instead of coming right at the onset of adult courtship, we wait a few weeks more (about 3 weeks) for the subadults to join the adults; the subadults then augment the adults' activities and 'practice' courtship for a while. This is all very imprecise, but the goal is to arrive when the most birds are nearest the breeding grounds – during the time when adults are still doing some courtship and preparing burrows and subadults are wheeling around, calling, and presumably spending more time near shore. It is admittedly a narrow window, and mostly guesswork on our parts, but we have been lucky with the Cahows each year in this window.

For Madeira, we disregarded the early-arriving (i.e., late-winter) adults and planned to visit about 3.5 weeks after the onset of courtship in late March/early April. By April's end, surely some adult pairs are already back at sea, the females eating heavily to gain weight to produce the egg, but we hoped that a visit before May would result in some success. Frank Zino suggested that late April was "early" for a visit to the nesting grounds, but our aim was only partly to see the birds at night in courtship – we wanted to search for one at sea as well. Moreover, we wanted to search for one at sea about a month or more before Fea's (Desertas) Petrels return to breeding grounds on nearby Bugio, to reduce (at least) the likelihood of having to sort through the larger gadfly petrels in looking for the scarcer smaller ones. Frank suggested that his earliest records for Fea's Petrel on Bugio came from late May, I believe. Minimally 120 pairs of Fea's Petrels of the "deserta" taxon nest there. (Any errors in the above are mine, of course!)

At the time the plan was formed to look for these birds at sea, no one had reported taking a boat out to look for them in the month of April, to our knowledge. This was somewhat worrisome, but until 1993, birders had not tried specifically to see a Bermuda Petrel at sea either. Jon Hornbuckle kindly sent notes from his April 1990 trip to Madeira (the only April notes I located) last year, when I visited there a bit earlier, 18-20 April 2003. I did not do any boat work then but did visit the colony at Pico do Arierio.

This year, we chartered, for a full day into evening, the *TORPEDO III*, a seaworthy boat with a captain who understood what we were looking for out there. I believe Antero Topp's groups have used the same boat and captain many times now, mostly in summer and fall. I highly recommend the captain and crew; the boat is very slow compared to similar North American boats but is good enough for the job. Chasing seabirds, as we sometimes do in the States, would not be feasible, however.

We boarded at 0900 and set out to the southeast, for the Desertas, on 27 April. Birds were, well, not plentiful, and I was struck how many more shearwaters tend to loaf just off Ponta da Cruz (where we were staying – Hotel Baia Azul, very nice) than in the waters east of Funchal. This has been reported to be the case at other times of year – it was a little disheartening, but not too surprising. Between Funchal and Bugio, we saw rather few birds: a dark-morph Pomarine Skua, many Atlantic

Yellow-legged Gulls, a Bulwer's Petrel (early by 2 days, according to Frank Z.), a Sooty Shearwater, a few Little Shearwaters, a dozen Manx and a few hundred Cory's Shearwaters, plus Common and Roseate Terns. No storm-petrels, as expected. Small dolphins went unidentified in the distance. The breeze came up steadily through the morning, and after lunch, we turned back toward the lee of Madeira.

Around 1330, we had gotten into more productive waters (our first and only good close look at Little Shearwater), roughly 8-9 km or so south of the headland nearest the airport, east of Funchal. Quite suddenly, a gadfly petrel appeared to port at about 250 m, flying directly toward the boat. I grabbed the camera but continued watching it and got everyone on the boat to watch it as well.

My first impression was that this was a petite bird – certainly larger than Little Shearwater but decidedly smaller than the Manx in body (if not wing length), I noted, and overall impressively less 'hefty', more delicate than the Fea's Petrels we see off the Carolina coast at home. The impression continued through the duration of the observation, which was perhaps a minute at most, as the bird flew directly toward us, passed us at about 8-9 m to port, as close as 7 m off the stern, and flew straight on toward shore. We attempted to chase the bird, but billows of black smoke came up the transom, and the boat's speed did not increase remarkably from its regular 10-12 knots. Near the close of the observation, I raised my camera, which had the 'lock' still engaged, and got nothing when I pressed the shutter.

In watching the bird, I looked for plumage differences from Fea's Petrels; I could detect nothing that stood out as different, truly. The head was rather pale, but some Fea's are very pale-headed, lacking the darker gray crown. Nor was there a pale mid-wing panel of greater secondary coverts such as has been described by some. If a smaller bird, the bird's overall structure also seemed comparable to Fea's – the hoped-for difference in wing-shape, described by several authors, was not at all apparent (the description of such features are not based on at-sea experience, if I read the literature correctly).

But the striking structural difference was this bird's bill – which was wonderfully shallow, even 'thin' in profile, which gave the bird a very different look from Fea's Petrel at close range. The bird's head looked dovelike (we had seen many Trocaz Pigeons the day before!), rather like one of the small "Cookilaria" petrels, for instance. Its appearance reminded me of the comparison of Bermuda to Black-capped Petrel – the Bermuda, long thought unidentifiable in the field (through 1993, at least), is a much more delicate bird, with a more delicate bill. This Zino's Petrel – and I am confident of this identification – was nearly as different from Fea's structurally as Bermuda is from Black-capped. It was like seeing a Fea's Petrel 'en miniature', a pygmy, as it were – the head, though small-appearing, seemed proportionally large for the bird's size in some sense, fitted with such a small bill, and the eye seemed to occupy less area in the head than the eye (and eyepatch?) of Fea's Petrel. The head in this respect was reminiscent of the 'baby-faced' appearance of *baroli* Little Shearwater, very different from the 'dour', 'business-like' mien of the Manx. The 'jizz' difference seemed comparable in difficulty to, say, Ross's versus Snow Goose or even, in some cases, Iceland versus Glaucous Gull – not a terribly difficult identification problem with a typical bird at close range.

I wish I could add more about differences in plumage or structure, but I could not detect any. The bird was immaculately white (unbarred) below, the wings slaty-gray below (just a streak of white along the coverts), the uppertail area pearly gray and contrasting nicely with the lower back, all

marks typical of “deserta” Fea's Petrel as well. After we lost the bird, I telephoned Frank Zino by cell from the boat and described the bird. He felt fully confident that we'd seen a Zino's Petrel, given both the close observation of the bird & bill and the time of year. He said we should be “shot at dawn” for failing to get a photograph, but such is seabirding. (We'll try again next year!) Frank was quick to point out that sightings of Fea's/Zino's Petrels off the south shore of Madeira are commonplace later in the year, but that most sightings are of distant birds not identifiable to species, as distance erases subtle cues as to size and proportion. I completely agree (distant Manx and Little Shearwaters seen from shore are a good case in point). It was very satisfactory to have Frank Zino's concord on our identification in this case; he is a cautious and careful observer.

Our group had, just the night before, experienced three courting pairs of Zino's Petrels on the breeding site with Amilcar Vasconcelos (one of the best local guides I've come across anywhere, by the way), some of them flying quite close (one nearly hit us!), under ideal conditions. This gave us an additional feel or index for structure and size, particularly the close birds, though we did not have the advantage of the full moon that I'd had in 2003. Nevertheless, the general structure and size of the species had been impressed upon us just 12 hours earlier, at close range.

We found this bird at sea without setting a chum slick and by cruising around. (A chum slick with plenty of ground squid and shrimp would make most sense, I think.) Later, when I looked over my notes, I realized that Jon Hornbuckle had observed unidentified gadfly petrels from the nearest point of land (Ponta do Garajau) in April 1990. So there may be something about this area that they like. I had thought, in planning the day, that it would be wise to lay offshore from the westernmost part of Funchal (whose longitude is within 0.005' of that of Main Ledge breeding area), in the late afternoon, as we do off Bermuda, waiting for adults and subadults to 'raft up', as they await nightfall to return to the breeding areas. (In fact, many gadfly petrels that are nocturnal on the breeding grounds appear to do this.) That area is near to Ponta da Cruz, where the prevailing winds seem to cut around the island and where many shearwaters gather (we saw many Cory's and Manx from seawatches there); just to the east, closer to the old section of Funchal, however, there is often much more lee (less breeze) and fewer shearwaters, as I understand it.

We did not end up trying an evening chumming off Ponta da Cruz and instead came back early, as many in the party were 'nackered' from our hiking at night (a new expression we learned there). All in the party – Steve and Michele Bloom, Wendy Ealding, Joanna Taylor, Jo Key, and Hugh O'Riordan – got a great look at the Zino's Petrel, and we celebrated at the Restaurante Dona Amelia, which we highly recommend.

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In looking over my field notes at home in conjunction with published measurements of Little and Manx Shearwaters, Fea's and Zino's Petrels (with our local race, the nominate, of Audubon's Shearwater thrown in for more Yank context), I noted that our impressions in the field appear to accord with the published morphometrics. While the Macaronesian gadfly petrels have impressive wing length for their size vis-à-vis the small shearwaters, they are both rather smaller than Manx in body length and weight. Because measurements taken by different authors vary considerably, I used measurements taken in the same way by the same person whenever possible.

AVERAGE BILL AND WING LENGTH

| | |
|------------------------------|-------------------------------|
| Fea's Petrel | culmen= 29; wing-length= 268 |
| Zino's Petrel | culmen= 25; wing-length= 247 |
| Manx Shearwater | culmen= 35; wing-length= 227 |
| Audubon's Shearwater | culmen= 29; wing-length= ~199 |
| Little Shearwater (_baroli_) | culmen= 25; wing-length= 178 |

These are averages, and though these two species of gadfly petrel do not overlap in bill measurements at all, there would surely be birds that could be more challenging to identify at sea. Importantly, no measurements of curvilinear length of maxillary unguicorn have been taken (as have been for Black-capped versus Bermuda Petrel), and I suspect that measurement of this feature would reveal a greater disparity (than do the caliper measurements of culmen) between the two eastern North Atlantic nesters, as it has for the western North Atlantic species.

What's most interesting to me here is that the difference between Fea's and Zino's Petrels in bill and wing is equal to that between Audubon's and Little Shearwaters, crudely put. These differences may seem small on the page, but I don't think that anyone familiar with nominate Audubon's would hesitate to say that his or her first encounter with _baroli_ Little Shearwater at close range failed to make an impression as to the petite aspect of head/bill and overall size, even when (as is the virtually always the case!) no Audubon's were present for direct comparison. I think the rarity of Zino's Petrel has led observers to be commendably cautious in the at-sea identification of this taxon,

but I do think that such average differences can be perceived at close range, in calm seas, in these closely-related taxa. With the discovery of a new colony of Zino's Petrels on Madeira recently, the population stands near 48 or more pairs, as I understand it – so perhaps one's odds of seeing a Zino's Petrel in the day time off the breeding grounds are not vanishingly small after all and are closer to the odds of seeing Bermuda Petrel, with a similar-sized population.

My impression at sea of a bird the size of Manx Shearwater, indeed even smaller, does not seem to be borne out by measurements of wing length above. However, the largest wing measurement in Manx is about 237 mm, while the smallest (of 13 measured) in Zino's is about 241 mm. A larger sample might bring those numbers closer still. But combining the numbers above with the ones below is more compelling, I think, as the weight and overall length of Zino's Petrel are both clearly less than Manx:

AVERAGE BODY LENGTH AND WEIGHT (LARGEST TO SMALLEST)

| | |
|------------------------------|---------------------------------|
| Manx Shearwater | body-length= 374; weight= 412 g |
| Fea's Petrel | body-length= 353; weight= 311 g |
| Audubon's Shearwater | body-length= 339; weight= 212 g |
| Zino's Petrel | body-length= 326; weight= 203 g |
| Little Shearwater (_baroli_) | body-length= 270+?; weight= ? |

In Madeiran context, these numbers suggest that **both** gadfly petrels are more delicate in mass/body than Manx Shearwater, shorter by some 6% in Fea's, by 13% in Zino's, even though their wings are longer on average. Weight is even more telling a measure: the average Manx is twice as heavy, nearly, as the average Zino's Petrel, which means that the petrel is really very dainty. Such differences should show up in the field to an experienced seabirder, I believe. My field impression of Zino's – limited to one daylight observation – bears out these morphometric distinctions, at least to my satisfaction. I hope to be luckier in the future in recording some of these impressions on film; a videocamera would have been the ideal tool for this encounter.

The North American context, provided by our handy Audubon's Shearwater, provides a reasonable yardstick: a sitting Fea's Petrel should appear a bit larger and huskier than an Audubon's (as the Fea's Petrels we observe do appear), while a sitting Zino's should appear smaller. Now, a gadfly petrel that seems smaller than an Audubon's Shearwater, and with a rather small bill, would certainly get our attention here. This perspective is important, as Audubon's Shearwater is our standard measure of the 'tiny' in procellariids on this side of the Atlantic, and they are abundant on many Gulf Stream trips.

Most of these musings are crude, but in attempting to find some way to quantify field impressions that come down to 'jizz', they are the best I can come up with.

I hope that others will try to see Zino's Petrel during the early breeding season. To contact sports fisherman, try the main harbor in Funchal. The Torpedo 3 can be booked through Turilobos Sports Fishing, tel. 291-23-84-22. They speak fine English and are most accommodating. They are familiar with birders and their interests.

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