

The Large, Dark Shearwater and Circular Logic

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With this installment of the Birding Photo Quiz, we usher in the Tom Johnson era.

Tom grew up with the ABA, I think it is safe to say—and that’s a source of great pride for ABA old-timers like myself. As a teenager, Tom participated in our ABA Young Birder programs, and he was an award-winner in several modules for the ABA’s Young Birder of Year contest. Tom’s photos and essays started to appear in Birding while he was still in high school. And as an undergraduate at Cornell, Tom bravely volunteered to be a contestant in the first “blind” photo quiz at Birding.

When it comes to birding and field ornithology, Tom has never been one to play it safe. He delights in pushing the frontiers of knowledge. He’s not afraid to go out on a limb. He inspires all who know him to approach birding and field ornithology with a spirit of adventure and discovery.

And that’s the message, I think you’ll see, in Tom’s inaugural photo quiz. Tom’s final determination is that our quiz bird is unidentified—and perhaps unidentifiable. Is that a dissatisfying conclusion? I don’t think so. As Tom leads us through the identification process, he exhorts us to rethink some of our most cherished notions about bird identification. That’s exciting. That’s very exciting.

I’m looking forward to learning a lot during the Tom Johnson era!

—Ted Floyd

This photo clearly shows some kind of seabird, and we can look straight to the “tubenoses” (order Procellariiformes) with a quick look at the culmen of this bird’s bill. Tubes present: Check! Storm-petrels and albatrosses can be ruled out by a glance at the structure of the bird, so we can move right to the group of medium tubenoses that includes the petrels and shearwaters (family Procellariidae). The overall coloration of the bird, including the overall dark underwings, doesn’t suggest any *Pterodroma* petrel (“gadfly petrel”). The small shearwaters, being dainty overall, can be eliminated as well.

We have narrowed it down to one of the larger, typically dusky or dark shearwaters. And, given the location, date, and relatively uniform dark coloration overall, can’t we just state the obvious? Why, we can even make out the color and pattern of the bill. Doesn’t this bird look like a Flesh-footed Shearwater?

Well, yes! It looks like a relatively large shearwater with dark brown underwings, a dark body, and a pale bill with a dark tip. Furthermore, there isn’t anything other than Flesh-footed Shearwater in the North American field guides very close in appearance to this bird. So is the case closed?

Hmm... don’t Flesh-footed Shearwaters have seriously dark bodies? This bird seems to have a gray-brown body that is distinctly paler than the head and underwing. And isn’t the color of the head also a bit light and warm for Flesh-footed? Suddenly our quiz bird has become a bit more complicated.

The bird seems to have the look of a large shearwater, and the only other



Our quiz bird was photographed by the author in Monterey Bay, California, on 5 August 2011.

species with this general build likely to be found in California waters in late summer is Pink-footed Shearwater. Pink-footed Shearwaters normally have whitish bellies and mostly pale wing linings, but darn, this bird sure shares shape and structural characters with that more-expected species.

If you do enough digging around in the world of seabird ID literature or talk to people experienced with the seabirds of the eastern Pacific Ocean, you are likely to hear about dark-morph Pink-footed Shearwaters. You won't find them illustrated in major field guides, presumably because they are reported only very rarely. The bird photographed here could surely fit the description of such a bird, being identical in shape and structure to a Pink-footed Shearwater, and with the light bits of a typical Pink-foot colored in with medium gray-brown.

But you may have been wondering about something: Where did this ID possibility actually originate?

A few scattered books and articles by experienced seabirders mention such individuals, invariably referring to them as some manner of dark Pink-footed Shearwater. However, in no source that I could find does anyone refer to specimens or tissue samples of such birds. Neither does anyone ever report seeing them at breeding colonies. Essentially, this identifiable group exists because people who are familiar with Pink-footed Shearwaters decided that these dark birds best fit within that species. In repeated observations of these rare individuals, these experienced seabirders have passed along the now almost dogmatic ID of such creatures as "dark-morph Pink-footed Shearwater."

One goal I have for this column is to look at some of the basics of the identification process and to critically examine that which is established in the oral and written traditions of bird identification. Pretend for a moment that we've been presented with a photo of a large American thrush with slaty gray upperparts, rusty-red underparts, and a white vent. We could compare those photos to specimens in a museum and determine that the photographed bird is virtually identical to the specimens labeled "American Robin." In this scenario, we would have very high confidence that we



Although the dark underwings with silver-tinged greater underwing coverts are consistent with Flesh-footed Shearwater, our quiz bird's bill is too dull and the neck and body seem too thick for that species.

are dealing with an American Robin because there would be plenty of physical, well-documented evidence to back it up. But what about a "mystery bird" that cannot be matched to a specimen or specimens? Would your identification of such a bird be defensible? Don't you need a reference specimen, or at least a tissue sample, for comparative study?

Identifications of dark-morph Pink-footed Shearwaters have apparently been made only at sea and have been supported only by descriptions, illustrations, and photographs.

Why couldn't these birds represent an entirely different species with an unknown breeding site? After all, we still don't know the breeding locations of a number of seabird species; Ringed Storm-Petrel and the newly described Puerto Montt Storm-Petrel come to mind. At the very least, why couldn't these large, dark shearwaters represent hybrids between Pink-footed and Flesh-footed shearwaters? That suggestion might be deflected by considering that Pink-foots breed in Chile and Flesh-foots breed in New Zealand. Then again, bird expert and native Chilean Alvaro Jaramillo has told me that Chile's two records of Flesh-footed Shearwaters come from islands where Pink-footed Shearwaters breed. It seems at least plausible that a rogue Flesh-footed \times Pink-footed Shearwater hybrid could occur on rare occasion.

Since dark birds called "dark-morph Pink-footed Shearwaters" are described to be identical to normal Pink-foots in structure and flight style, maybe the conventional wisdom is correct. Perhaps there are some rare alleles in the population of Pink-footed Shearwater that manifest themselves in phenotype on very rare occasions. But how will we know for sure?

This quiz column will return to a more traditional, multi-bird layout with the new photo quiz (see p. 72), but I'd like for this shearwater to serve as a reminder about a key point in bird identification. To be blunt, I'd like to inject a bit of healthy skepticism into how we view bird identifications based on the dogma of our field guides and con-



Our quiz bird's long, straight wings and the substantial contrast between the underparts and the wing linings point away from Flesh-footed Shearwater as the correct identification.

ventional wisdom. The current quiz tells us that we must be prepared to question the existence of dark-morph Pink-footed Shearwaters until they are physically documented by a tissue sample or a specimen; failure to do so might cause us to fall into an unproductive spiral of circular logic. I will admit freely that the vast majority of what I've learned about bird identification is digested from the discoveries of those who came before me, and I place a huge value on the observations and conclusions that

ornithologists and expert field birders have made in the past.

However, in avoiding the potential trap of recycling circular logic, I'd like to emphasize the role that uncertainty plays in bird identification and promote the idea that there are *lots* of birds that we shouldn't, and indeed *cannot*, identify accurately based on visual or even aural clues. On that note, let's call this bird, seen on a Shearwater Journeys trip in Monterey Bay, California, on 5 August 2011, an **unidentified dark *Puffinus* shearwater**.

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