Madeiran Storm-petrel off Scilly: new to Britain

Robert L. Flood

Abstract A Madeiran Storm-petrel *Oceanodroma castro* was seen and photographed from a boat approximately 12–14 km southeast of Scilly on 28th July 2007. The bird made two close passes to the boat, some 50 minutes apart, making it possible to note the key identification features and to reconfirm these during the second sighting. A record photograph was obtained. A previously accepted record of Madeiran Storm-petrel, one found dead at Milford, Hampshire, in November 1911, was removed from the British List in 2008 and thus the Scilly bird becomes the first accepted record for Britain.

On the evening of 28th July 2007, I was on board MV *Sapphire*, south of the Isles of Scilly, together with four other birders – Alan Hannington and John Higginson from Scilly, Tony James from Newcastle, and Ken Adelsten Jensen from Norway – and skipper Joe Pender, who also has an interest in seabirds. The southwesterly wind had increased after we left the harbour, from a force 3 to a force 5. There was 100% cloud cover and earlier rain had all but ceased, although there was some sea spray that was a problem when looking into the wind. The light and other observation conditions were good looking downwind. When we were approximately 12 km southeast of St Mary's quay we began drifting and chumming, and were soon watching European Storm-petrels *Hydrobates pelagicus* heading in from downwind, which we carefully checked in the hope of finding a Wilson's Storm-petrel *Oceanites oceanicus*.

At about 18.55 hrs, I was located on the port side of the cabin, looking downwind. Through binoculars I saw a long-winged, black-brown storm-petrel rise over the crest of a wave, heading directly towards the boat. Immediate impressions said it was not a Wilson's. Compared with Wilson's it was larger, the arm relative to the hand was longer, and the wings were not flattened but were held in a shallow M-shape. Neither did those first impressions resonate with Leach's Storm-petrel *Oceanodroma leucorhoa*, in particular because the jizz and flight behaviour of the bird were steady and methodical rather than tern-like. The possibility of Madeiran Storm-petrel *O. castro* flashed into my mind. For those reasons, and for only the second time in 12 years of pelagics out of Scilly, I yelled to the other birders: 'Get on this storm-petrel!'

Despite those very early impressions, my next stage of thinking, during the following ten seconds or so, was like trying to force a square peg into a round hole, trying to make this storm-petrel a Wilson's – perhaps because a Madeiran off Scilly was just too incredible to believe. Moreover, in those early stages, there were some similarities between a Wilson's and our bird, such as a relatively straight trailing edge to the wing and purposeful travelling flight behaviour. And, of course, we were expecting to see Wilson's! Conversely, Leach's was never a serious candidate.

When it was about 30 m from the boat, this mystery storm-petrel banked to its right and began methodically quartering the sea surface. At this distance I could see an upperwing-covert bar that did not reach the leading edge (in Leach's it does reach the leading edge) and was not as pronounced as on a typical Leach's. The white rump was broader than it was long (that of Leach's is normally longer than it is broad), extending to the lateral undertail-coverts (unlike Leach's), and was still clearly visible when the bird banked

away showing its underside (in similar circumstances the white rump on Leach's is then hard to see). Therefore, the 'band rump' was seemingly always visible as the storm-petrel manoeuvred around, a feature not apparent on Leach's. The tail of our bird was short and the rear end looked particularly short relative to the wingspan (in comparison, the rear end of Wilson's looks relatively long, even when the feet are retracted and the toe projection thus eliminated). There was no toe projection beyond the end of the tail (Wilson's typically has obviously projecting toes).

The bird was approaching close to the stern and I expected it to pass the stern and head into the slick off the starboard side and feed. Instead, it banked to its left and flew parallel to the port side, some 12 m from the boat. We had front-row seats for this performance and the differences from Leach's and Wilson's quickly became apparent: the relatively thick bill (thinner in Leach's and Wilson's); the chunky body (relatively slim in Leach's and Wilson's); the leading edge of the wing was mildly angular at the carpal joint and the trailing edge was gently angular (both sharply angular in Leach's, and the trailing edge in Wilson's is all but straight); the arm was broad (narrow in Leach's); and the wing-tips were moderately blunt (very pointed in Leach's and Wilson's). In addition, the underwing was evenly black-brown, similar to the body. These plumage features, among many other plumage and structural features, also eliminated both species of *Fregetta* storm-petrel – White-bellied *Fregetta grallaria* and Black-bellied *F. tropica* – which both show largely white underwing-coverts and belly (normally with a dark central stripe in Black-bellied). The European Storm-petrels present were simply dwarfed alongside our bird as it continued by.

The jizz was consistently methodical, almost predictable: not buoyant and sometimes unpredictable as Leach's; not hirundine-like as with Wilson's; and not like a small bat as with European. It rose up to 3 m above the sea surface on several occasions (this is very rare in Wilson's and European, which almost always keep within a metre of the sea surface).

By now I was trying to accept that this storm-petrel had to be a Madeiran, but could it really be? Having noted all relevant structural and plumage features, flight behaviour, and briefly considered other possible storm-petrel species, I was now confident enough to call it: 'It's a Madeiran!'. The bird continued on, past the bow, and then, banking to its left, moved away from the boat and was lost to sight. The whole event lasted about a minute. The precise location was 049°51.741'N 006°08.781'W.

When I first saw the Madeiran, my instant reaction was: 'This is really different!' I shouted so loudly that even Joe Pender, fishing off the stern, heard me through the wind and turned around to see the bird fly by. However, after I yelled out, nobody uttered a word, and this, coupled with incredulity, slight panic, and some resonance with the jizz of Wilson's (see above), led me to doubt my first impression and, after a short while, to say questioningly: 'It must be a large Wilson's?' John Higginson replied that it was too large, and this helped to calm my mind a little, but not totally. Experience in many oceans alongside the world's seabird experts reminded me that even the best have been tricked by size illusion – Madeiran for European Storm-petrel is one example that comes to mind (also see Flood & Fisher 2011, pp. 25–26) – and to begin with there was no opportunity for comparison with local storm-petrels. What's more, Wilson's vary significantly in size, and the jizz of a small Wilson's is quite different from that of the largest. Flight actions of one especially large Wilson's, seen well and photographed off Scilly in 2005, set it apart from others and will be remembered by birders on board at the time (see plates 3 & 4). John Higginson also noted the lack of toe projection, but here again I was aware that Wilson's can retract their legs thus eliminating toe projection, 'when it can look remarkably like band-rumped [Madeiran]' (Killian Mullarney in Robb *et al.* 2008). In 2000, in the early years of Scilly pelagics, Kris Webb, Ashley Fisher and I watched a Wilson's off Scilly with legs retracted, which caused considerable confusion in the identification. Put simply, a lack of toe projection does not eliminate Wilson's. It was the *combination* of key characteristics of flight behaviour, plumage aspect, and structure, described above, that allowed

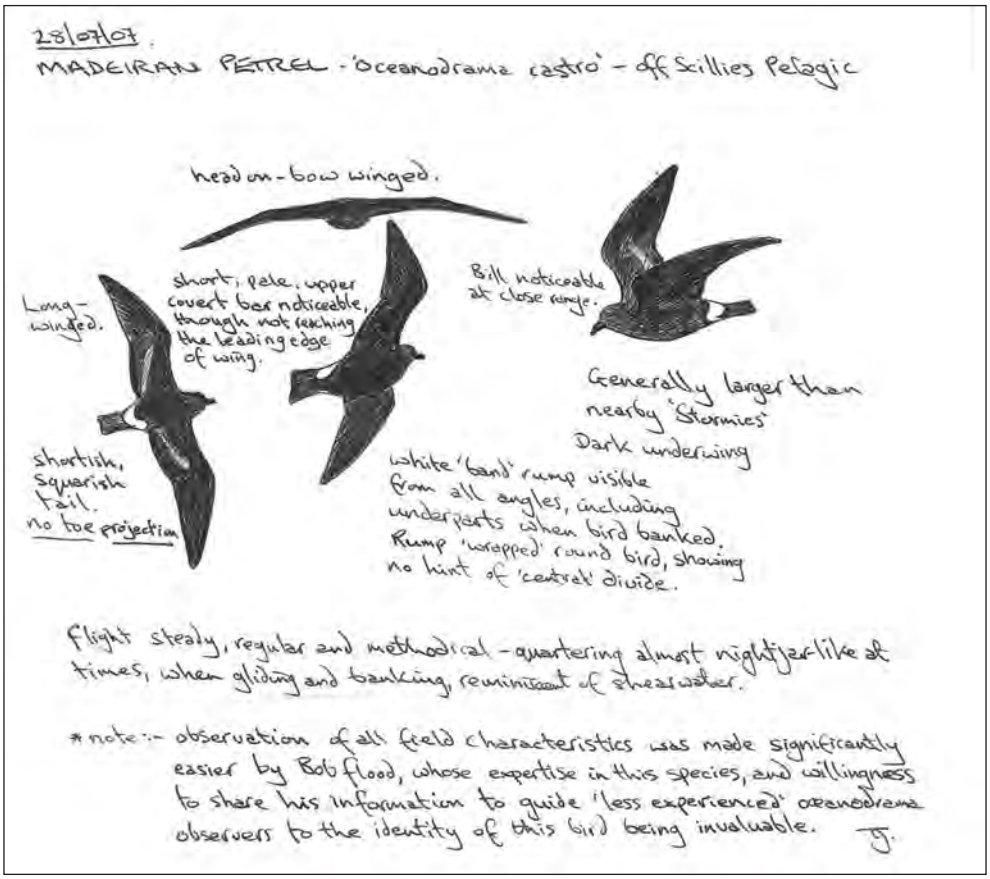
Joe Pender

1. Madeiran Storm-petrel *Oceanodroma castro*, 27th July 2007, c. 12 km southeast of St Mary's quay, Scilly. The combination of structure and visible plumage aspect shown in this image are unique to Madeiran. Note the long outstretched wings, considerable length of the arm relative to the hand, that the leading edge is mildly angular at the carpal joint and the trailing edge gently angular, the wing-tips are moderately blunt, the tail is short relative to the wingspan, the 'band rump' extends much deeper on the underside than in Leach's, and the underwings and body are all dark. Also note that the Madeiran is about three metres above the sea surface. This record shot clearly shows several key field characteristics that in combination are diagnostic of Madeiran Storm-petrel.

identification to click into place.

In reality, even though it was such a momentous bird, the identification was clear-cut and categorical, given the close pass and excellent views with all key field identification features seen, and so celebrations began immediately. However, we did not have an experienced photographer on board and none of us amateur photographers had a camera at hand, instead keeping them bagged because of the sea spray. The lack of photographic evidence was niggling at the back of my mind. Half an hour or so later, the revelry had passed its peak and we had mostly fallen quiet as the facts had begun to sink in.

And then, at about 19.45 hrs, I was amazed to see the Madeiran approaching the boat for a second time. We were treated to an



Tony James

Fig. 1. Madeiran Storm-petrel *Oceanodroma castro*, 28th July 2007, off Scilly.

almost carbon-copy performance and an opportunity to once again run through all key field-identification features. This time I yelled to the skipper, Joe Pender, to take photos and he had time to run into the cabin, turn on his all-in-one camera, and take a couple of photographs (Joe now has top-of-the-range equipment…). One snatched record shot shows enough of the features mentioned above for the bird to be identifiable as a Madeiran Storm-petrel (plate 1). The exact location of the second sighting was 049°51.590'N 006°07.422'W, c. 13.5 km southeast of St Mary's quay.

The Scilly Madeiran was clad in what looked like very fresh plumage, and was presumably a recently fledged juvenile or freshly moulted immature or adult, and was certainly not in wing moult. Different populations of Madeiran Storm-petrel in the Atlantic breed at different times of the year, some of them 'time-sharing' burrows, with each population having non-overlapping breeding and dispersal periods, and hence different moult timings. Unfortunately, the state of plumage of the Scilly Madeiran does not obviously point to the age or origin of the bird.

It was extremely helpful though quite astonishing that this sighting occurred just two weeks after publication of the article in *BB* that deals with identification of 'black-and-white' storm-petrels of the North Atlantic (Flood & Thomas 2007). Preliminary details of this sighting appeared in Flood (2007).

Description

Jizz Like a European Nightjar *Caprimulgus europaeus*. Chunky-bodied and fairly heavy-billed, black-brown, flight methodical and predictable – overall rather plain.

Body length and wingspan Medium-sized, appearing much larger than accompanying European Storm-petrels – Alan Hannington commented at the time that: 'It's like a small shearwater.' Taking into account size illusion among storm-petrel species at sea, I would estimate the body length and wingspan ratios

David Shoch

David Shoch

2. Madeiran Storm-petrels *Oceanodroma castro*, Hatteras, North Carolina, USA, 27th May 2009. The wing pose shown here is typical of travelling Madeirans, with wings held outstretched. Both the leading edge and the trailing edge are moderately angular, and the wing-tips are bluntish. The upperwing-covert bars are greyish-brown and fairly conspicuous, but they are not long and teardrop-shaped and do not reach the leading edge, as on Leach's. The 'rump patch' is narrow with the longer uppertail-coverts tipped dark. The thigh patch is fairly wide and extends farther onto the underside than on Leach's. The tail is fairly long, square-ended, and the corners are slightly rounded.

for European Storm-petrel versus the Scilly Madeiran Storm-petrel to be in the region of the (known) ratio of 1:1.4.

Structure This bird was not in moult, thus there were no moult-related issues that affected structure. *Wing shape* Long, broad arms, blunt-ended wing-tips, most of the time held straight out so that the leading and trailing edges were only moderately angular at the carpal joint. *Head-on profile* Slightly bowed in a shallow 'M', the arm of medium length, the hand long. *Tail Shape* Shallow fork/notch, but appeared square-ended when fanned as the bird manoeuvred. *Toe projection* None. *Body build* Chunky. *Bill shape and proportions* Relatively thick, bulky, and quite heavily hooked.

Plumage *General colour* Black-brown and overall rather plain-looking. *Upperwing-covert bars* At range, quite uniformly dark upperwings with fairly indistinct covert bars. Closer views showed a dull bar formed by the greater coverts that stopped short of the leading edge. *Underwing-coverts and axillary feathers* Uniformly black-brown. *White rump patch* Narrow, rectangular, broader than long, extended to lateral undertail-coverts and rear flanks, seemingly always visible. *Belly* All dark. *Bill* Black. *Eyes* Dark. *Legs* Not seen.

Flight behaviour In travelling flight, steady and buoyant with short runs of shallow wingbeats, low banking turns, small-shearwater-like glides, occasionally rising to 3 m above the sea surface in these manoeuvres. When searching for food, the bird weaved a regular zigzag route and quartered areas of the sea surface.

Elimination of other storm-petrel species

European Storm-petrel European is much smaller and those present on the evening of 28th July were dwarfed by the Madeiran. European Storm-petrel has a weak and fluttery bat-like flight, enhanced by the short arm and hand and by blunt-ended wings that are always strongly angular at the carpal joint on both the leading and the trailing edge. It shows a compact, short body and a short, gently rounded tail; a pale upperwing 'pencil line' bar, and white underwing-covert panels. The bill of European is short, slim, and only slightly hooked.

Wilson's Storm-petrel Wilson's is smaller than Madeiran (but see comments on judging size – above) and, indeed, we had seen a reasonable number of them off Scilly in the preceeding two months, so the larger size of our Madeiran when it first appeared was immediately apparent. The flight behaviour and jizz of Wilson's is well characterised by the 'hirundine' simile, quite different from the methodical nightjar-like flight of Madeiran. Structurally, Wilson's has an evenly proportioned body with long and spindly legs that typically project beyond the tail in travelling flight. The wingspan of the Scilly Madeiran was visibly longer than that of a Wilson's (based on those recent observations), which has shorter wings that are more angular at the carpal joints on the leading edge and straighter on the trailing edge. The head-on profile of Wilson's shows the wings held straight and stiff, with a short arm and medium-length hand. The tail is of medium length, slightly concave with rounded corners, and the rear end looks quite long relative to the wingspan, unlike the rear end of the Scilly Madeiran, which looked particularly short. Wilson's typically shows obvious and broad upperwing-covert bars that begin short of the leading edge and extend to the body, and which are much more obvious than the covert bars on the Scilly Madeiran. The bill is of medium length and only slightly hooked; the Scilly Madeiran had a relatively bulky bill that was heavily hooked.

Leach's Storm-petrel Leach's flies with buoyant and graceful, deep, languid wingbeats, and may make unpredictable changes in flight speed and direction. The wings are long, quite narrow, show decidedly pointed wing-tips, and the leading and trailing edges are markedly angular. In comparison, the Scilly Madeiran was longer-winged than Leach's, this impression being especially so when the wings were held outstretched, so that the leading and trailing edges appeared only moderately angular, and the wing-tips

Bryan Thomas

3. Wilson's Storm-petrel *Oceanites oceanicus*, 13th August 2005, Isles of Scilly. A large Wilson's, with a protruding head and neck, long body, long wings, long caudal projection, and a long toe projection.

Bryan Thomas

4. Wilson's Storm-petrel *Oceanites oceanicus*, 19th March 2006, Grytviken, South Georgia. There is observable variation in size in Wilson's (clinal or subspecific) from short dumpy birds to longer slimmer birds. Consequently, flight behaviour is quite fluttery in small birds, stronger and swifter in large birds. Plates 3 and 4 respectively show a large and a small Wilson's (notwithstanding a different angle of photograph) that give the feel/jizz of two quite different storm-petrels.

Fig. 2. Madeiran Storm-petrels *Oceanodroma castro* breed in the northeast Atlantic (orange dots; in summer, or winter, or both), but rarely move north to western Europe, where they are an extreme vagrant (blue dots). Wynn & Shaw (2009) reported four at sea in late August, notably north of the breeding grounds: two at 45°14'N 12°12'W, and two at 46°25'N 11°16'W (the latter about 650 km southwest of Scilly). Brereton *et al.* (2003) reported one in the Bay of Biscay. There are 21 extralimital records in Europe (including Fennoscandia) to the end of 2010, as follows: Finland (one wrecked January), France (five – one at sea August, one at sea September, three in October with two at sea and one wrecked), Ireland (one October hit lighthouse and died), Spain (12 – one wrecked January, one wrecked February, one at sea June, two ringed July, four at sea August, one wrecked October, two wrecked November), Switzerland (one wrecked December) and the UK (one at sea July) (Flood & Thomas 2007 updated).

were blunt. The Madeiran looked longer-winged than a Leach's because its wings were mainly held outstretched. In comparison with Madeiran, Leach's tends to hold its wings swept back, the body is rather long and slim, the tail is deeply forked and scooped, and the bill is relatively long and slender, and appears only slightly hooked. The upper-wing-covert bars of Leach's are normally striking, stretching across the wing-coverts to the leading edge. Leach's shows a white rump patch that is dull and not gleaming white, barely extends to the undertail-coverts and rear flanks, is longer than it is broad, and is hard to observe at sea, especially when the bird banks away.

Black-bellied and White-bellied Storm-petrels

These are fat and compact birds, fly like an exhibition windsurfer and tend to skim close to the sea surface. The wing shape of *Fregetta* storm-petrels is broad with a short arm, but with strongly curved leading and straight trailing edges that taper to pointed wing-tips. When they are seen head-on, their profile shows slightly arched wings held in a shallow-M, with a short arm and long hand. The *Fregetta* tail shape is short and square-ended, and the bill shape is short, broad-based, and finely hooked. On both *Fregetta* species the upper-wing-covert bars are normally even less conspicuous than shown by Madeiran, and the underwings have obvious white covert panels. Both also show extensive amounts of white on the belly, and although the pattern varies, neither species ever shows an entirely dark belly as the Scilly Madeiran did.

Status on the British List

Madeiran Storm-petrel was formerly included in Category B of the British List based upon a bird said to have been found dead on the beach at Milford, Hampshire, on 19th November 1911. During its review of

this record, BOURC was unable to locate any published description of the bird and, as the specimen was untraceable, its identification was not verified. Moreover, there was no indication whether or not the bird, found dead on the beach, had actually died in British waters. Consequently, this record was deemed to be unacceptable and the species was removed from the British List in 2008 (BOU 2009).

As this was a potential first for Britain, the Scilly claim was assessed by BBRC and the file then forwarded to BOURC for review. Owing to the difficulties involved in assessing seabird records, this process took four years to complete, in part because of the extent of research required. However, in September 2011, the Scilly bird was accepted and Madeiran Storm-petrel was added to Category A of the British List.

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Editorial comment Adam Rowlands, Chairman of BBRC, commented: 'This has been one of the more complex records that BBRC members have had to consider. It was originally submitted by Bob Flood (RLF) in autumn 2007 and the initial BBRC circulation occurred between November 2007 and June 2008. The original file consisted of RLF's description, two photographs from Joe Pender, and field notes and sketches from Tony James.

'After the circulation had begun we realised that corroboration of the circumstances and identification of this potential 'first' would be essential. Submissions were sought (and obtained) from other observers on the boat. There were some discrepancies about the circumstances of the find but the key identification details remained consistent. At about the same time, BOURC began a review of the only other British record and it was quickly apparent that the Scilly record would have to be considered as the first for Britain. During the circulation, Killian Mullarney was approached and asked to comment on the best photograph and the sketches, given his significant field experience with birds in the "Madeiran Storm-petrel complex" for the production of Robb *et al.* (2008), and he provided a positive endorsement of the record.

'Members were asked at the end of the circulation period to consider their votes and comments in the context of all the additional information that had arisen during the assessment process and, despite some reservations relating to the circumstances of the find, there was agreement on the identification and the record was accepted unanimously by BBRC and passed to BOURC for consideration in late summer 2008.

'However, in the light of new evidence (about the identification of Madeiran Storm-petrel) which came about during the assessment by BOURC, the file was returned to BBRC in early 2009 for reconsideration, an unusual step but in this case wholly justified. By this stage the file contained a significant volume of information and had grown rather complex and challenging to assimilate and review. As a consequence, the recirculation was rather protracted, lasting from February 2009 to April 2010. However, after all the material presented by BOURC was considered, the conclusion of BBRC members remained the same. The record was accepted unanimously and returned to BOURC for consideration.

'Records of fly-by seabirds are some of the most difficult to assess and the Committee requires particularly convincing evidence to be sure that a genuine mistake has not been made. The

Committee can empathise with the difficulties confronting observers compiling descriptions of a major rarity seen only in flight and in the challenging circumstances of a small boat in a rolling sea. Nonetheless, it assists the assessment process no end if observers endeavour to provide a clear recollection of events, avoiding the uncertainty that inevitably creeps in if details appear to be in any way contradictory. In this case the discrepancies were ironed out and the record accepted unanimously by BBRC in both its initial and final circulations.'

Martin Collinson, Chairman of BOURC, commented: 'When BBRC has accepted a potential first, it is relatively unusual for BOURC to decide that the identification is not proven. This is effectively what happened to this record on its first circulation, which is one of the reasons for the four-year delay before its final acceptance, and deserves some explanation. Relating to the descriptions, some members questioned whether this level of structural and plumage detail could be observed accurately on a moving bird in a rising force 5 wind, whether it could be definitively stated that the bird was not in moult, and whether the second sighting could automatically be assumed to relate to the same individual or species as the first. However, these issues had already been considered by BBRC. What ultimately led to the file being returned to BBRC on first assessment were two new pieces of evidence. The first related to the record shot (plate 1). There were in fact two photographs submitted, apparently showing the bird flying away at speed, the better of which has been reproduced here. BOURC was able to show that a Leach's Storm-petrel photographed at a similar angle, range and resolution would appear structurally similar to the bird in plate 1, could possibly show an apparently unforked tail and still have a visible white rump. While the submitted photograph was, therefore, undoubtedly consistent with Madeiran Storm-petrel, it was considered far from diagnostic. The second line of evidence was that BOURC members became aware of new levels of plumage and structural variation in Leach's Storm-petrel. It was shown that some Leach's Storm-petrels are in tail, but not wing, moult in July, and this could lead to an individual showing a reduced tail fork. The presence of a short, squarer tail also makes individuals appear long-winged. Examples of Leach's Storm-petrels with proven square 'band' rumps and unbroken white rumps also came to light. Some of these data were subsequently formally documented in Miles (2010). Enough BOURC members were sufficiently concerned that the possibility of an aberrant or unusual Leach's Storm-petrel had not been sufficiently critically assessed to determine the identification as not proven, and it went back to BBRC with this information, which subsequently endorsed the record.

'On the second circulation, BOURC concurred with this decision. The conclusion from Miles (2010) was that only about 1 in 2,000 Leach's would show a combination of all-white, band-shaped rump, short squarish tail and apparently long wings, and even this would not explain the presence of a bird off Scilly in July, where Leach's Storm-petrels are virtually unprecedented, nor would it explain the other structural and flight-pattern characteristics observed and described accurately by the observers, one of whom is an acknowledged expert on identification of storm-petrels at sea. It can perhaps be stated that the level of photographic evidence for this record compares unfavourably with that available for two other seabird 'firsts' in previous years, Fea's Petrel *Pterodroma feae* and 'Scopoli's Shearwater' *Calonectris diomedea diomedea*, but there seems to be no further doubt that the observers saw and correctly identified a Madeiran Storm-petrel. The subspecies cannot be ascertained, and in light of potential future splits, it is possible that Madeiran Storm-petrel's residency in Category A is going to be short-lived.'