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Razorbill - New to Bermuda

A Razorbill was discovered in the Great Sound on Sunday 22nd February when Audubon member Sgt. Paul Watson was making a routine patrol from Hamilton to Dockyard. It is the first time this species of bird has been seen in Bermuda. It was sitting on the surface of the water and making regular dives in search of fish. Andrew Dobson quickly joined Sgt. Watson to get photo documentation of this exceptional record. The vertical white line through the bill and the extensive area of white behind the eye indicate that it is an adult in non-breeding plumage. Bearing in mind the extreme weather experienced on the US east coast it was not a total surprise. Other birds driven south and seen in Bermuda recently include Northern Gannet, Long-tailed Duck, Iceland Gull and Bonaparte's Gulls.



Razorbills belong to the family of birds known as Alcids, which also includes puffins. This crow-sized seabird is widely distributed through boreal and low-arctic Atlantic waters; the bulk of the world population breeds in Iceland. The centre of the North American breeding population is in southern Labrador and the North Shore of the Gulf of St. Lawrence. With only about 300 pairs nesting in Maine, the Razorbill is among the least numerous of all breeding seabirds in US waters. Most Razorbills from North American colonies overwinter south of their breeding range in ice-free, coastal waters, with largest numbers frequenting shoal areas in the outer Bay of Fundy and Gulf of Maine. The species occurs regularly in winter south to Long Island, NY, and New Jersey, and rarely to Virginia, with casual records to Florida. (*Photos Andrew Dobson*).

Extraordinary land gift marks 60th anniversary



Diamonds are the traditional gift for a 60th anniversary, but Audubon received something even more precious – a gift of 2.5 acres of open space in St. George's Parish. The three undeveloped lots east of Mullet Bay Road and south of Stokes Point Road were gifted to the Society by the owner, who wishes to remain anonymous. The land will now be protected in perpetuity as a nature reserve. It includes an arable field that will remain in production. "The Bermuda Audubon Society is enormously grateful for this generous gift made in its 60th anniversary year," said Society president Andrew Dobson. "On our increasingly over-developed

island every piece of open space is precious. By placing this land in our care, our private anonymous benefactor has provided a permanent safe haven for native and endemic flora and fauna and a green oasis for the enjoyment of generations of Bermudians to come." The Audubon Society already owns the nearby Stokes Point Nature Reserve, to the west of Mullet Bay Road. This 3.6 acre reserve was purchased on generous terms in 1980 and includes a restored pond. It has walking trails and is open to public. The new reserve may also be open with a trail in due course. (*Photo Paul Watson*).

40th Christmas Bird Count 2014



In conjunction with National Audubon in the US, the Bermuda Audubon Society held its 40th CBC on 27th December 2014. Features of this year's count included:

- 7,493 individual birds were counted (well down on last year's total)
- 92 species of birds (99 in 2013, 101 in 2012, 88 in 2011, 101 in 2010, 100 in 2009)
- European Starling was the most common species (21.6% of the count)
- Record counts for Hooded Merganser and Horned Grebe

Members of the Bermuda Audubon Society discovered a Snow Goose at Clearwater while doing the annual Christmas Bird Count. Nearly 7,500 birds were recorded of 92 species on the December 27 count day with an additional 7 species in count week. This year's CBC went very well and we recorded an above average number of species. Observers were keen to see whether this year's two hurricanes had taken its toll on local birds. Numbers of bluebirds, white-eyed vireos and cardinals seem to have held up well, but the number of mourning doves was about half the number recorded in recent years. The most numerous species was the starling, which combined with the kiskadee and sparrow, made up over 50 per cent of the birds seen. Highlights this year included the recording of 18 species of wood warbler, 15 species of wildfowl, with record numbers of hooded mergansers and only the second ever record of a redhead duck on count day. The results are submitted to the National Audubon Society in the United States as part of a continent-wide study of birds that has been running for more than 100 years. Citizen Science provides a way for people to connect with the natural world through activities that generate vital information for the conservation of birds. The observers can learn about birds by taking part in these science-based activities and Audubon's science staff gains invaluable information. The Audubon Society says the practice also benefits the birds because it helps the organisation focus on those birds and habitats that need our help most. Count results will be available as they are entered on to the National Audubon website, www.audubon.org/bird/cbc.

Introduction of critically endangered Governor Laffan's Fern to the Audubon Society's Sears Cave Nature Reserve Jeremy Madeiros



Fig. 1: Sears Cave Nature reserve, showing abundance of native ferns

The Sear's Cave Reserve is a unique Nature Reserve owned by the Bermuda Audubon Society and located near St. Mark's Road in Smiths Parish. This Reserve was donated to the Society in 1990 in memory of past owners Sir Howard and Lady Trott, and was officially opened in 1992 after the installation of boundary fencing, removal of tons of garbage from the cave, and the removal of invasive introduced pest plant species.

Measuring just over half an acre in size, the reserve nevertheless is of great conservation and geological importance and interest, containing one of the largest sink-hole caves to be found in the central parishes. This sink hole is over 60 feet deep and is surrounded by an area of restored native/endemic woodland. It is an important habitat for several rare native and endemic fern species and is perfect for the growth of ferns, being sheltered, shady and humid. Since the establishment of the reserve, it has been envisaged as a location where other rare or endangered fern species could be established, making Sears Cave into Bermuda's first fern sanctuary. In addition, the restored native woodland in the reserve and the surrounding secondary woodland host both native woodland bird species and a host of migratory species such as Warblers, Vireos and Thrushes during the autumn, winter and spring.

Foremost among the ferns found growing in and around the sink is the Bermuda Cave Fern <u>Ctenitis sloanei</u> (formally known as <u>D. speluncae</u>), a large fern which was once thought to be endemic to Bermuda but has since been reclassified as native. It has a very specialized micro-habitat requirement, being normally found only at damp cave entrances or cave sinks. It is critically endangered on Bermuda, only being found in three other locations in the Walsingham area, and the largest known population by far is found in Sears Cave. A survey carried out in January 2015 found at least 43 mature specimens in the cave, whereas only 2-4 specimens each remain at the other three locations. In addition, a number of small, juvenile cave ferns were noted, indicating that they are still successfully reproducing here. Other ferns found in Sears Cave include the largest specimens known in Bermuda of the uncommon native Larger Marsh Shield Fern <u>Thelypteris kunthii</u> (also called Kunth's Maiden Fern and Southern Shield Fern), as well as the endemic Bermuda Maidenhair Fern <u>Adiantum bellum</u>, and the native Sword Fern <u>Nephrolepis exultata</u>.

Unfortunately, recent investigation by Bermuda Biodiversity Coordinator Alison Copeland has determined that many of the ferns in Sears Cave that were previously thought to be Cave Fern are in fact an introduced invasive species of fern native to the Pacific region, with the botanical name of <u>Macrothelypteris torresiana</u>. The future

management of Sears Cave will probably require selective removal of this fern to prevent it from out-competing the sensitive native and endemic fern species.

As this Reserve contains critically endangered fern species, it falls under the mandate of the Terrestrial Conservation Division of the Dept. of Conservation Services. The Terrestrial Conservation Crew has carried out specialized management work in and around the cave sink since 1992. Much of the ongoing management involves the constant removal of invasive introduced plant seedlings, mainly of Brazil Pepper <u>Schinus</u> <u>terebinthifolius</u>, Fiddlewood <u>Citherexylum spinosum</u>, Indian laurel <u>Ficus microcarpa</u> and Queensland Umbrella Plant <u>Schefflera actinophylla</u>. These regularly sprout in the upper section and sheer sides of the sink. A rather unusual invasive plant, the Taro or Dasheen <u>Cococasia esculenta</u> has been a persistent and difficult to control problem on the steeply sloping floor of the sink. The large leaves of Taro, reaching 5 to 7 feet, overshade and kill the native ferns, and its tuberous roots penetrate deeply into the rubble substrate. After removal, the smallest bits of root remaining between and under the rubble can quickly regrow in the damp conditions. Through years of effort by the Terrestrial Conservation Crew, Taro has now been almost completely controlled in Sears Cave.

Arguably Bermuda's rarest endemic plant, and one of the rarest ferns on Earth, is Governor Laffan's Fern *Diplazium laffanianum*, which used to grow in cave entrances and crevices in the Paynter's Vale area (now the Tucker's Point Property). It was last seen growing in this area in 1905 by the prominent botanist Nathaniel Lord Britton, but became extinct in the wild shortly after (Britton, 1918), apparently because of over-collection by fern enthusiasts for greenhouses and private collections. For many years, the only known specimens remaining were 8 plants in the Fern House (now part of the Bermuda National Gallery) at the Botanical Gardens, which is where I first saw them in the mid-1980s. After being moved to the Tulo Valley plant nursery, damage to the greenhouse they were in during hurricane Fabian in 2003 resulted in only 3 specimens surviving. The Governor Laffan's Fern became so close to extinction that drastic measures became necessary, and in 2001 spores from these ferns were sent to the United States for propagation at the Plant Conservation Department of the Henry Doorly Zoo in Omaha, Nebraska. A few of the young ferns resulting from this project were returned to Bermuda in 2006, 2009, 2012, and many more in 2014. Most have been under the care of Alison Copeland at the Dept. of Conservation Services, and Kimberly Burch at the Dept. of Environmental Protection. By 2014 the largest had grown to the point where an attempt could be made to re-introduce them to the wild in appropriate habitat.

On January 22, 2015, about 15 small Governor Laffan's Ferns were planted in Sears Cave by Alison, as part of an ongoing project to return the species to the wild after an absence of more than a Century. They were planted in different locations within the sink to see exactly where the Fern will grow best, and will be monitored and possibly bolstered by additional plantings over the next few years. The native flowering Turnera shrub *Turnera ulmifolia* was also planted in the sink. In addition, I took the opportunity to re-introduce the endemic Bermuda Peperomia *Peperomia septentrionalis* to Sears Cave. This rare and attractive plant is also endangered and was last recorded in Sears Cave in 1918 by N. L. Britton.



Fig.2: Alison Copeland planting young Governor Laffan's Ferns in Sears Cave, Jan.2015

Bird Report Nov 2014 to Feb 2015

Andrew Dobson

Highlights included the first Razorbill for Bermuda, the first Redhead since 1987, and first Canvasback since 1979.



An imm. **Snow Goose** was seen on Southside motocross track 27 Dec-28 Feb+ (RP). A female **Eurasian Wigeon** was at Devonshire Marsh 7 Nov to 27 Jan (AD). A **Canvasback** at Stokes Point NR 5-31 Dec+ (DBW) was the first since 1979. Another was found at Warwick Pond 14-31 Dec (AD). A male **Redhead** (*photo left*) discovered at Port Royal GC 21 Nov to 28 Feb+ (DBW) was the first since 1987. A **Long-tailed Duck** was seen in the Dockyard marina 22 Feb (PW). An adult male **Bufflehead** was at Spittal Pond 5-8 Nov accompanied by a female to the 9 Nov (AD). An adult male **Hooded Merganser** was at Port Royal GC 6-14 Nov (AD). A wintering flock of Hooded Mergansers increased to 18 at Mangrove Lake 2 Jan (AD). A

record eight Horned Grebes were present into February including 7 seen together (photo below)at Somerset Long Bay (TW, AD et al.). A very early White-tailed Tropicbird was seen off Cooper's Point 29 Jan (LT). A Magnificent Frigatebird was seen in various locations 28-31 Jan (PW). A Masked Booby was photographed 5 miles south of Bermuda 2 Feb (CS). A Northern Gannet flew past Spanish Point 2 Feb (RB, JF) and perhaps the same bird over the Causeway 22 Feb (PW). Twenty-six Cattle Egrets reported on 2 Nov included 24 at Jubilee Road (AD). A Glossy Ibis at Somerset Long Bay remained to 28 Feb+ (AD). A very early Swallow-tailed Kite was seen over Warwick 28 Feb (FD, AD). A number of **Purple Gallinules** were reported during the winter period including Somerset Long Bay 1 Dec (DBW). Two Ruddy Turnstones at Tobacco Bay 3 Jan had green identification markers and were found to have been banded on New Jersey beaches on 13 May 2012 and 17 May respectively (AD, PW). A Ruff was on Port Royal GC 21 Nov (AD). Bermuda's first Razorbill was discovered in the Great Sound 22-26 Feb (PW). An Iceland Gull was first noted in St. Georges Harbour 11 Feb (DBW). A Forster's Tern was at Dockyard 27 Dec to 1 Jan (DBW). A Royal Tern was at Dockyard/Watford Bridge 28 Jan-22 Feb (DBW). This bird had been banded in North Carolina in July 2014. A Ruby-throated Hummingbird was at Camden marsh 4-5 Jan (AD). Two or three Peregrine Falcons wintered with one found dead in Paget 16 Jan (LF). The latest recorded Least Flycatcher was on Mid-Ocean GC 14-15 Nov (PW). Horned Larks (4) were first noted at Lukes Farm 26 Nov (PW) after which a flock wintered at Bermuda Airport with a maximum 35 birds 28 Dec (AD). A Golden-crowned Kinglet was seen in the Arboretum 9 Jan (PW). A Hermit Thrush wintered at BIOS (PW). More than 20 species of warbler were recorded during the winter months. A Summer Tanager was at Ferry Point Park 1 Jan (PW). (Photos Andrew Dobson)

Observers: Richard Brewer, Andrew Dobson, Fiona Dobson, Jenny Flood, Luke Fountain, Jeremy Madeiros, Ron Porter, Camilla Stringer, Lynn Thorne, Tim White, Paul Watson, David Wingate.



Society News



There has been so much to report since the last newsletter – first of all a big 'thank you' to:

- Coral Beach and Tennis Club for a donation of more than \$22,000 for the continued maintenance of the Alfred Blackburn Smith Nature Reserve, an 8.7-acre coastal property to the west of the club. The money will be used to cull casuarinas and to plant cedars, palmettos, olivewoods and other native species as part of a phased plan that will continue this year. (*Photo above shows members of Coral Beach and Tennis Club and the Audubon committee*).
- Horsfield Landscape and Design for donating a day of their time in November to work on the Society's A.B.Smith nature reserve clearing up after the damage caused by Hurricane Gonzalo. Also to Sousa's Landscape Management for providing their services free of charge to clear the paths at our Somerset Long Bay nature reserve.
- Lecturers who have delivered fascinating presentations. In November, Bruce Pearson talked about the birds on South Georgia and the efforts to clear the island of rats. Proceeds donated from his talk were donated to the South Georgia Heritage Trust for the rat eradication effort. In January Andrew Dobson gave a lecture reviewing the birds of 2014. This talk can now be viewed on CH.2 (CITV). In February we had a fascinating talk from Ian Fisher on the Birds of Japan.
- Audubon members who volunteered to clear footpaths at our Seymour's Pond reserve.
- Argus 'Walks the Walk' and Centre on Philanthropy for organising the fund-raising walk and any walkers who decided to donate money to Audubon.
- Volunteers who assisted as birding guides during the National Trust's children's walk at Spittal Pond.
- Audubon members who have supported our fieldtrips, especially the Cahow trips in November and the recent Spittal Pond trip.



Finally, many congratulation to Nigel Chudleigh, recognised by the Centre on Philanthropy at a recent Volunteers' Appreciation Reception for his great contribution to the Society over very many years including cutting wood for bluebird nest box kits and helping with nature reserve management. Shown in the photo are (1 to r) Brian Madeiros (COP Chairman), H.E. The Governor, Wayne Scott M.P., and Nigel Chudleigh.

Presenting our new website www.audubon.bm

Our new website is full of information about the society, our conservation efforts and birding in Bermuda that was not available on our previous site. We have also included an Education section with resources and useful links for educators as well as some bird-related activities for children. An exciting new addition is BirdTrax, which shows all the latest sightings in Bermuda that have been entered into eBird.

Events – for your diary

Saturday 14 March

9:30 - 11:00 am. Bluebird nest box workshop at Government House stable block (enter from Langton Hill). Bring the family and your own hammer. Materials supplied to make your own box - \$25 per kit.

Sunday 15 March

10:00 – 12:00 noon. Cooper's Island fieldtrip in conjunction with the Bermuda National Trust. Meet at East entrance to Nature Reserve opposite Clearwater Beach next to the large car park. 1st tour group leaves at 10am, 2nd group at 10:30am & 3rd group at 11am for approx. 2 hour walk & talk. \$20 for members, \$30 for non-members, children 12 years or under \$5. Wear comfortable shoes & bring water & binoculars. No Dogs Allowed!

Sunday 3 May

Vesey Nature Reserve tour run in conjunction with Community and Cultural Affairs as part of Heritage Month. Time to be confirmed.

Friday 16-Sunday 18 October

Paget Island Bird Camp