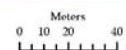




Alfred Blackburn Smith Nature Reserve Visitor Guidelines



(c) Ministry of Works and Engineering



ESSENTIAL INFORMATION FOR VISITORS

Where is the reserve?

The Alfred Blackburn Smith Reserve is situated in Paget Parish, bounded to the north by South Road, to the east by the Coral Beach Club and to the west by the Surfside Beach Club. The reserve is 8.7 acres in size.

Who can visit the reserve?

When BAS acquired the reserve by gift we promised to ensure that recreational use was kept 'low key' by limiting access to the reserve to members of the Audubon Society and members and guests of Coral Beach Club. Audubon members may visit the reserve by appointment (tel: 238-8628 or email info@audubon.bm) and are welcome to bring their families and friends. Children under the age of 12 should be accompanied by an adult. Members and guests of the Coral Beach Club may visit the reserve at any time during daylight hours.

Conservation agencies and organisations may be granted supervised access to the reserve for purposes consistent with those of the BAS.

How do I become a member of the Bermuda Audubon Society?

The membership application form is available on our website www.audubon.bm or may be obtained by telephoning 238-8628 or by sending an e-mail to info@audubon.bm.

What activities are allowed on the reserve?

Visitors to the reserve may enjoy passive recreation pursuits such as birdwatching, photography and whale-watching during the spring migration. Recreational visitors are required to keep to the established walking paths and must take away whatever they bring with them to the reserve, as trash bins are not provided. Dogs **MUST** be kept on a leash at all times.

Although camping, fishing and trail-bike riding have occurred in the past, they are no longer permitted. Impacts caused by illegal or inappropriate visitor use have included litter, fires, and damage to native vegetation, rock erosion and disturbance to threatened seabirds. Signage is provided to inform visitors of the nature conservation values and regulations relating to the reserve.

Members of Audubon Society working groups may be involved in the active rehabilitation of the various habitats within the reserve. Such activities might include the culling and replacement of exotic trees and weeds with native and endemic trees and plants.

FURTHER INQUIRIES:

Inquiries about the Alfred Blackburn Smith Nature Reserve should be directed to the Bermuda Audubon Society, on (441) 238-8628 or e-mail: info@audubon.bm

ALFRED BLACKBURN SMITH NATURE RESERVE

History and Purpose

The Alfred Blackburn Smith Nature Reserve was established in 2002 by a voluntary conveyance and gift to Bermuda Audubon Society of an 8 acre parcel of private property on the south shore of Paget Parish, west of Coral Beach Club, by Elfrida Chappell, in memory of her father. Her intention, as formalized in a covenant attached to the conveyance, was to secure the open space values of this property in perpetuity as a nature reserve for the preservation of Bermuda's natural coastal features, native flora and bird-life.

The covenant includes a proviso that members and guests of the Coral Beach Club as well as members of the Bermuda Audubon Society would have access to the reserve during daylight hours. In compliance with Mrs. Chappell's wishes and to maintain the primary purpose of the reserve, visitors are restricted to passive recreation such as walking and nature observation.

Management of the reserve by the society will include maintenance of a trail system, culling of invasive "pest" plants, restoration or enhancement of native plant communities by additional plantings, and creation of additional nesting cavities for Longtails along the coastline.

For those members of the public who value our rural and natural heritage, this extraordinarily generous gift provides a unique opportunity to gain access to an extensive and beautiful coastal area that was previously private. All that is required is to become a member of the Bermuda Audubon Society.

MAJOR FEATURES OF THE RESERVE:

Landform and Geology

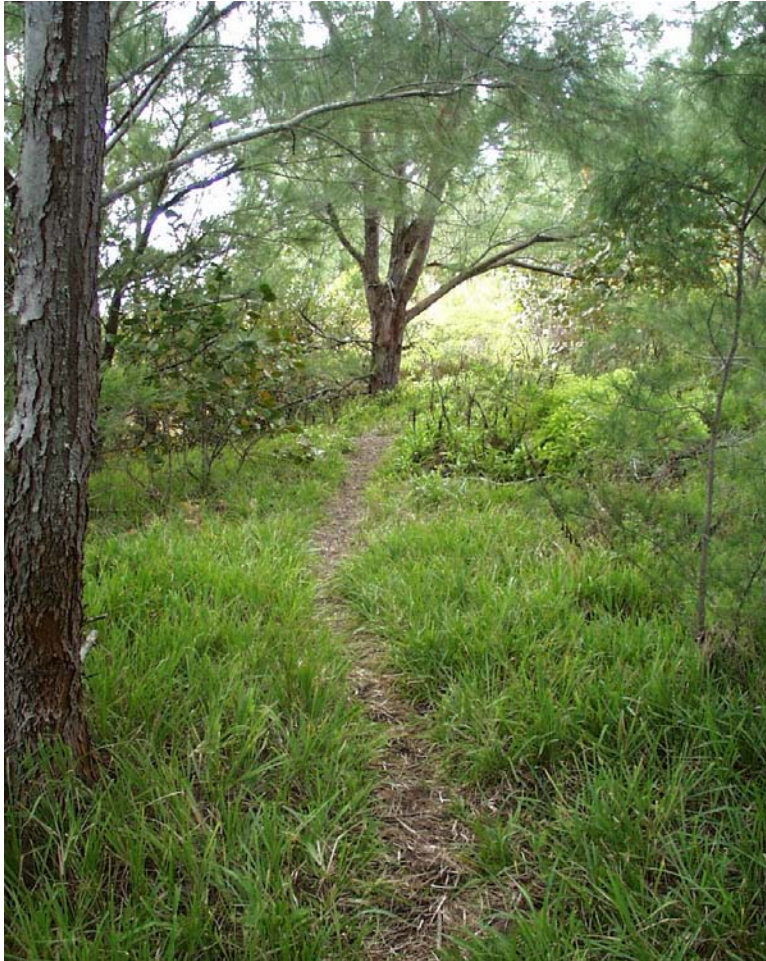
The aerial photo-map of the reserve shows the location of the two main access points, the nature trails and the contours. The reserve consists of a 30m high ridgeline paralleling the coast for approximately half a kilometer. This is one of a very few coastal areas left in Bermuda where no houses or other evidence of development is visible from the trail. The ridge itself was originally a coastal dune derived from beach sand blown inland by gales in the last interglacial period about 80,000 years ago, known as the “Southampton formation”. Carboic acid in rainwater soaking through this fossil dune would gradually result in the sand grains cementing together to form the Bermuda stone that we quarry to build our houses with, but this dune has barely begun to cement into rock. The coastal slope of this dune ridge would originally have had a gradual 10 degree slope, but this has been eroded away to form sea cliffs during the present interglacial high sea stand over the last four thousand years. The soil cover on the ridge is very sandy and probably includes a veneer of recent (Holocene) sand blown up from Elbow beach.

The trail along the ridge top overlooks the ocean in an area where two rows of Bermuda’s unique **Boiler reefs** are especially well developed and close to the shore. These circular and almost mushroom shaped “living” reefs are built up by a combination of crustaceous algae and vermetid gastropods (sea snails), which capture their nutrients or planktonic food from the waves that boil over them. They are only able to grow, therefore, in a high-energy environment.



The Major Plant Habitats and their Species Composition

Visitors entering the reserve from the South Shore Road entrance climb up through the steep inland slope of the ridge which is covered in a forest of introduced and naturalized Allspice *Pimenta dioica*, Fiddlewood *Citharexylum spinosum*, and Chinese Fan Palm *Livistona chinensis*, with a scattering of giant Australian Casuarinas or “Whistling Pines” which were planted on the hillside years ago. The ground cover here consists primarily of the introduced and naturalized Eupatorium *E. riparium*, with some Morning Glory *Ipomoea villosa* and Asparagus Vine *A. setaceus*. Native plants are rare in this part of the reserve because they can't compete with the height and deep shading of the invasives, but look for the **Bermuda snowberry** *Chiococca bermudiana* and **Darrell's fleabane** *Erigeron Darrellianus*. (All native and endemic plant species listed for this reserve are highlighted in bold print.)



Visitors entering from the Coral Beach Club follow the ridge top trail, which overlooks the more open and exposed coastal slope. The diversity of flora is greater here and with a wider selection of low stature native species, because they do not become over-shaded. Bushes and small trees in this area include

Sea Grape *Coccoloba uvifera*; **Bermuda Cedar** *Juniperus bermudiana*; **Jamaica Dogwood** *Dodonaea jamaicensis*; **Bermuda Snowberry**; Common Sage Bush *Lantana involucrata*; **Shrubby Fleabane** *Pluchea symphyrtifolia*; Japanese Pittosporum *P. tobira*; Brazil Pepper *Schinus terebinthefolia*, and the very distinctively small leaved native **Box Briar** *Randia aculeata*, which is confined almost exclusively to this part of Bermuda.

Ground cover species include **West Indian Grass** *Eustachys petraea*; **Seaside Goldenrod**; Wireweed *Sida carpinifolia*; **Poinsettia weed or Joseph's Coat** *Poinsettia heterophylla*; Beggar's Ticks *Bidens pilosa*; **Bermudiana** *Sisyrinchium bermudiana* (our national flower); **Darrell's Fleabane**; **Jamaica Vervain** *Stachytarpheta jamaicensis*; **Capeweed** *Lippia nodiflora*; **Turnera** *T. ulmifolia*; Red-berried Asparagus *A. densiflorus sprengeri*; Broom Grass *Andropogon glomeratus*; Perennial Fox Tail Grass *Setaria viridus*; Bull Grass *Sporobolus berterioanus*; Wedelia *W. trilobata*; and Fennel *Foeniculum vulgare*.

Towards the southwestern end of the reserve the ridge top trail drops down into a saddle and a side branch here leads down to the **rocky coastal zone**. The dominant species in this zone are **Coast Spurge** *Euphorbia buxifolia*; **Sea Ox-eye** *Borrchia arborescens*; **Tassel Plant** *Suriana maritima*; **Buttonwood** *Conocarpus erecta*; **West Indian Grass** and **Seashore Rushy Grass** *Sporobolus virginicus*. Rare coastal species in this area are **Beach Lobelia** *Scaevola plumieri*, and **Bay Lavender** *Mallotonia gnaphalodes*.

Vegetation Management

The introduced Australian Casuarina has begun to self seed in the rocky coastal zone and on the coastal slopes seaward of the main trail. As these threaten to block the view and over-shade native species, a concerted effort is being made to cull them out. Other species being culled out of this area are the invasive Brazil Pepper, Chinese Fan Palm, and Red-berried Asparagus.

Simultaneously, efforts are being made to re-plant with endemic trees including the **Bermuda Cedar**, **Bermuda Palmetto** *Sabal bermudana*, **Bermuda Olivewood** *Cassine lanearia* and **Southern Hackberry** *Celtis laevigata*, trees which once dominated the forests of Bermuda. Other native species which have been planted on the reserve are **Coast Sophora** *S. tomentosa*, and the extremely rare **Yellow Wood** *Zanthoxylum flavum*.

Birds and Other Wildlife

Landbirds are not especially common on the coastal slopes of the reserve because the sea wind is often very strong, blowing up the slope and whistling or roaring in the casuarinas. However, the native **Catbird**, **White-eyed Vireo**, and **Ground Dove** can usually be seen, and the introduced **Great Kiskadee** and **European Goldfinch** can readily be seen, especially in the casuarinas. The society has installed nest boxes for the native **Eastern Bluebird**, but they rarely venture into the reserve, preferring the mown areas of Coral Beach Club.

Both resident and migratory landbirds are much more common in the forested inland slope of the reserve and at least 20 species of wood warblers, plus Indigo Buntings can be seen during the spring and fall migrations (March-May and August-October). American Redstarts, Ovenbird, Black-and-white Warbler, Parula Warbler, Palm Warbler, Myrtle Warbler, Northern Yellowthroat and Indigo Bunting generally winter on the reserve. **Yellow-crowned Night Herons** *Nyctanassa violacea* may sometimes be encountered.

Because of its size and seclusion, the reserve has also been host to some shy and unusual species at times, such as the Long-eared Owl that roosted there in the winter of 1995. **White-tailed Tropicbirds**, or “**Longtails**” as Bermudians call them, nest in cavities in the coastal cliffs between March and August, and may occasionally be seen into October. They are very conspicuous and noisy over the water near shore as they carry out their paired aerial courtship ritual which involves touching the tips of their elongated central tail feathers together while in flight.

Two species of introduced **Anole Lizard** from the West Indies are common and conspicuous on the reserve: *Anolis jamaicensis* from Jamaica and *Anolis bimaculatus leachii* from Antigua. The rare endemic **Bermuda Rock Lizard** or **skink** *Eumeces longirostris* probably survives in the coastal zone of the reserve, but it is very secretive and can be hard to see although sometimes readily attracted to picnic scraps, such as cheese or tuna fish sandwiches. The **Red Land Crab** *Gecarcinus laterallus* is extremely common on the reserve and riddles the sandy soil with its burrows. It is predated on at night by the **Yellow-crowned Night Heron** which was introduced as a breeder on Bermuda in 1976-8 to replace the endemic night heron predator of the crab, which was exterminated in early settlement time.

The reserve is also an excellent vantage point from which to look out for **Humpback Whales** passing off the south shore of Bermuda during their spring migration in the month of April.

Historic Notes

The main trail is deeply rutted in places because it was formerly used more extensively as a coastal bridle path.

During the Second World War, when the Americans built the airport on Bermuda, they set up anti-aircraft “ack ack” guns for target practice at this and nearby coastal sites. Aircraft would tow a tubular canvas target down the south shore and the guns would fire out to sea at them. One of the leveled platforms for these guns is still detectable just seaward of the summit of the highest point on the reserve.

Recommended Guides

A Birdwatching Guide to Bermuda, by Andrew Dobson

Bermuda’s Botanical Wonderland, by Christine Phillips-Watlington

Coastal Bermuda: 10 Walks and 73 Plants You’ll See Along the Way, by Amy Pearson