

History of the Date Palm (*Phoenix dactylifera*) and other Exotic Palms of St Helena, Ascension, and Tristan da Cunha Islands, South Atlantic Ocean

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Abstract

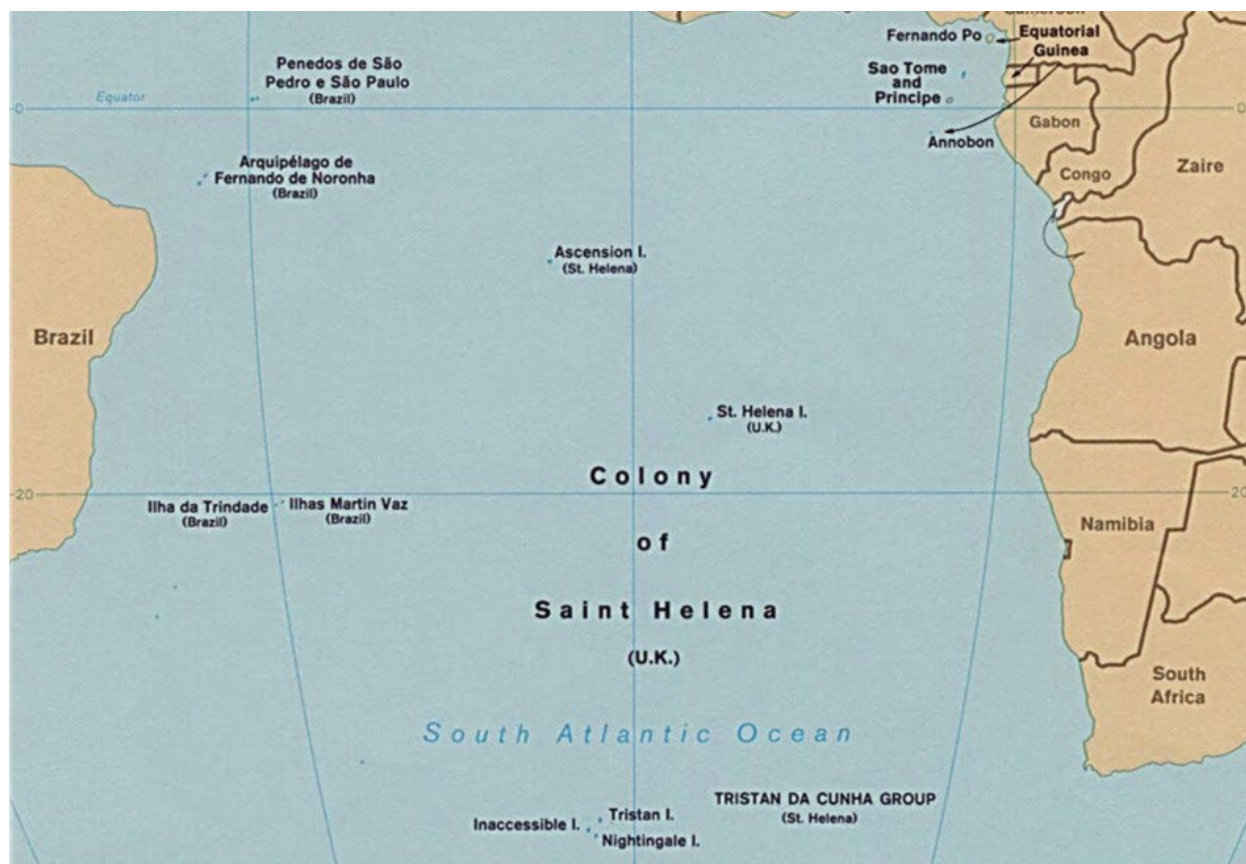
This study documents the historic introduction and recent presence of the date palm, *Phoenix dactylifera*, and other *Phoenix* spp. on the remote, isolated islands of St Helena, Ascension, and Tristan da Cunha in the South Atlantic Ocean. In the course of research, information about the other exotic palms of the islands was found and is included here because it, too, is also poorly known. No palms are indigenous to any of these islands. In addition to published documents, paper ephemera, such as photographs, postal cards, and postage stamps, were important source materials.

Introduction

In the early 15th century, the date palm was under cultivation in its homeland (present-day Iran and Iraq), Arabia, North Africa and South Asia. During the European Age of Discovery, explorers and colonists introduced the date palm (*Phoenix dactylifera*) farther south in Africa, to the Americas and Oceania (Johnson 2010).

The global geographic range of the date palm and its congeners is not completely known. Seedling date palms growing over long periods of time in isolation under diverse climatic conditions may have evolved land races with advantageous traits. These specimens represent genetic repositories of potential value for elite cultivars that could, via biotechnological applications, enhance resistance to insect pests and diseases, convey hardiness, and improve fruit quantity and quality. Therefore, it is of interest to identify such relict date palm populations and some possible natural hybrids between the date palm and other *Phoenix* spp. for scientific assessment.

The primary purpose of this study is to document the historic introduction and presence of the date palm and other *Phoenix* palms on St Helena, Ascension, and Tristan da Cunha. In the course of research, information about the other exotic palms of the islands was found and is included here because it, too, is also poorly known. Palms are not indigenous to any of these islands.



1. South Atlantic Ocean; locations of Ascension, St Helena, and Tristan da Cunha islands. U. S., C. I. A., 1973.

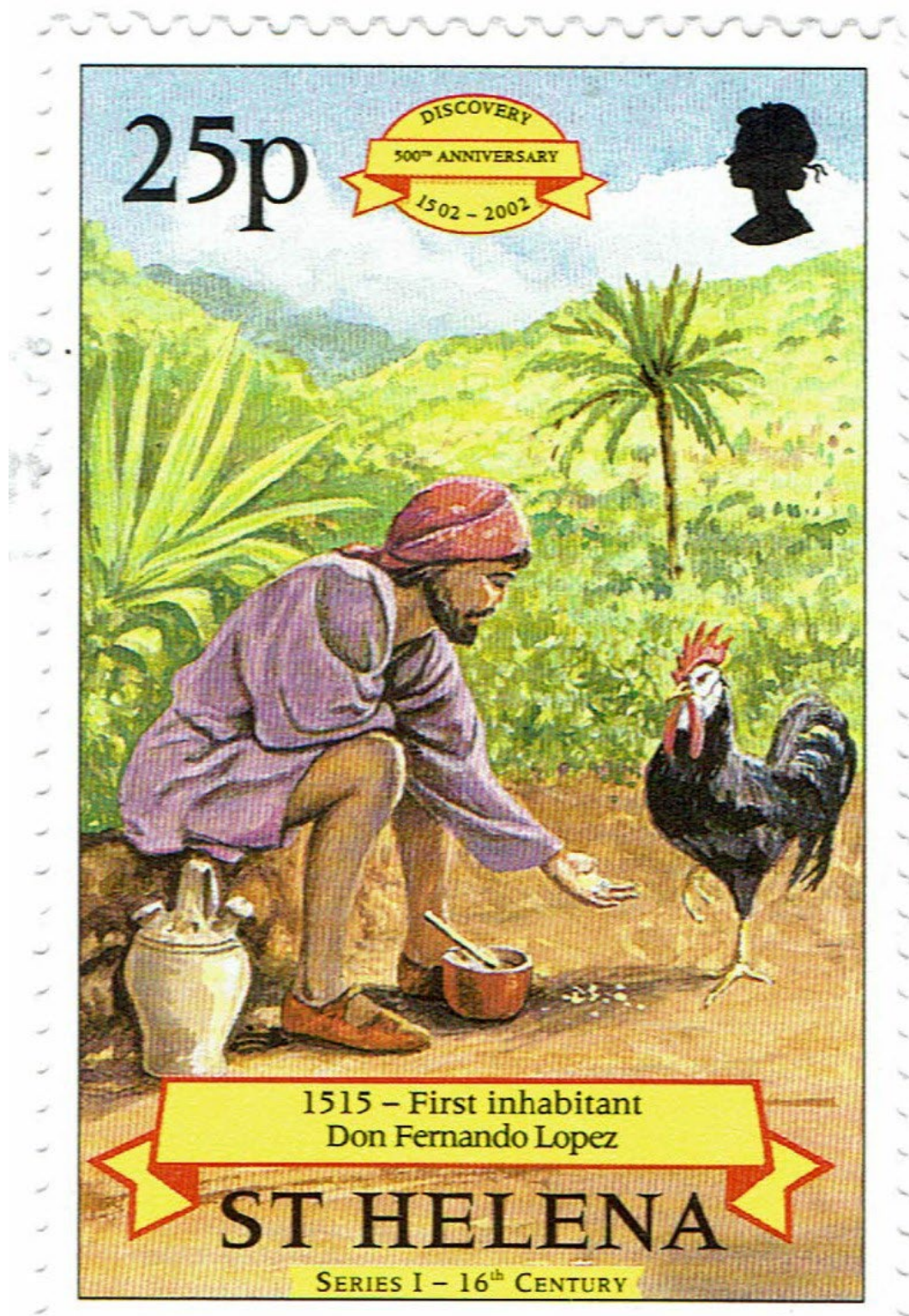
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Uninhabited when discovered and named by the Portuguese in the first decade of the 16th century, these three small, widely separated volcanic island groups are located along the fracture zone of the mid-Atlantic ridge (**Fig. 1**). Today they constitute a single British Overseas Territory.

An account of the human settlement and the introduction of *Phoenix* and other palms to each island group is given below.

St Helena

St Helena [15°56' S, 05°43W] Köppen Climate: Jamestown, Bwh, hot desert; Longwood, Cfb, warm summer.



2. St Helena commemorative postage stamp issued 1997 depicting the Portuguese role in early settlement with a date palm.

The isolated island of St Helena is in the South Atlantic Ocean some 1165 miles west of the African mainland. Originally covered in forests, it possesses water resources and the potential for agricultural production.

Over time, St Helena became a small but successful British territory with an economy based upon agriculture, fisheries and, more recently, tourism. In 2021, the human population was 4400. Historically, St Helena is best known as the site of Napoleon's exile from 1815 until his death there in 1821.

Dates reached St Helena early in its settlement history. After discovery by the Portuguese in 1502, St Helena became a provisioning port for sailing ships of various nations (**Fig. 2**). The island's first inhabitant is believed to have been Fernando Lopez, a nobleman who chose voluntary exile on St Helena in about 1515 rather than face treason charges in Portugal. Details are sketchy concerning subsequent human settlement and associated plant and animal introductions by European powers. However, by 1588, when the British explorer Thomas Cavendish provisioned his ship in St Helena, he recorded the production of figs, lemons, oranges, pomegranates, shaddocks (like grapefruits), and date palms (Brooke 1824).

After the British East India Company took control of St Helena by Royal Charter in 1659, they established a number of gardens and plantations which included numerous fruit trees. According to plant lists, the date palm was growing vigorously in Jamestown in 1789 and is recognizable in an 1810 drawing of the town (McCracken 2022).

Melliss (1875) wrote that date palms did well in Lower Jamestown, where 30–40 trees were present, producing perfect fruit in September at Maldivia. Some trees were 60 years old and had begun flowering in 1810. Two or three trees observed at higher elevations but were not thriving.

In the early 1880s, Maldivia Garden was documented to have date palms of two kinds ("two kinds" is not explained). The St Helena Botanic Garden at that time included the Bussorah (Basrah, Iraq) date palm. Elsewhere, Cambrian Cottage reportedly had "date (Arabian) palms" and Willow Cottage, a date palm (Grant 1883).

An 1886 visitor to St Helena described the botanical garden in Jamestown as severely neglected but still with fruit-bearing trees. A date palm "crowned with bunches of yellow fruit" was observed, with a tin collar affixed three feet up the trunk to prevent rats from reaching the fruit (Walker 1886).

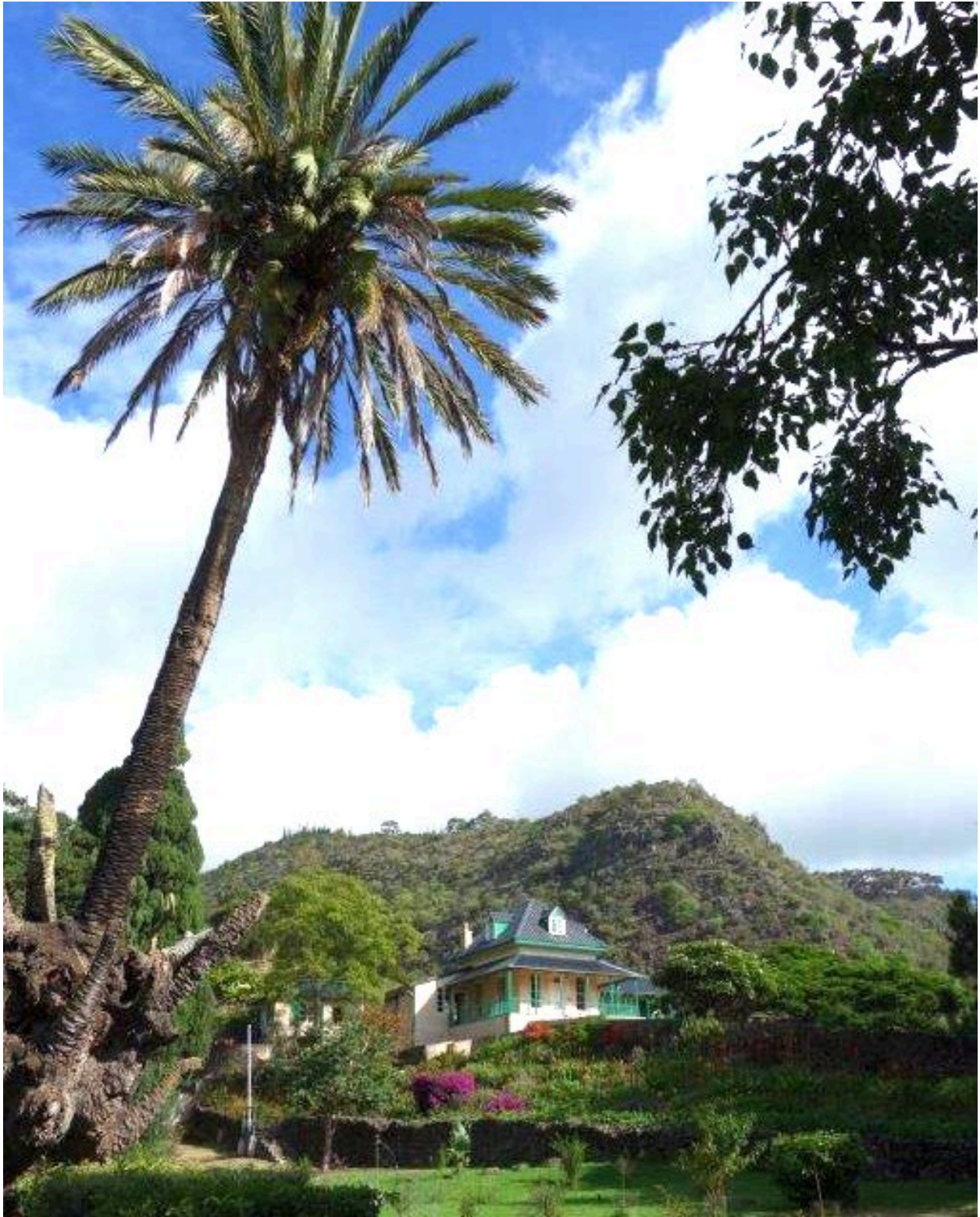
Two photographs document date palms in St Helena in the early 1900s: a modest house in Maldivia with an adult date palm in 1903 (**Fig. 3**) and a postal card of the Upper Jamestown Valley from 1909 (**Fig. 4**). Another mature date appears in a modern photo of The Briars in Jamestown



3. House in Maldivia neighborhood of Jamestown, St Helena, with a mature date palm. Historic photograph 1903. St Helena Island Information.



4. Upper Jamestown, St Helena. Postcard (cancelled 1909). Mature date palm lower right.



5. The Briars, Jamestown, St Helena. Mature date palm. Photograph 2023 by Jim George. St Helena Travel & Tourism.



6. Lower Jamestown, St Helena. View south up James Valley, mature date palm in center. Undated modern photograph. Jamestown Compact Nature.



7. Ladder Hill, St Helena, view north; James Valley to right. Date palms lower left appear to be naturalized. Undated modern photograph. Google Maps.

(Fig. 5) with Napoleon’s temporary exile residence in the background. In another undated contemporary photo of Lower Jamestown (Fig. 6), a single date palm is seen.

Convincing evidence that the date palm is naturalized on St Helena is presented in the photo (Fig. 7) of a cluster of plants atop Ladder Hill overlooking Jamestown.

A recent photograph of Longwood, Napoleon’s permanent residence (Fig. 8), reveals the presence of two mature Canary Island date palms (*Phoenix canariensis*). The botanical literature does not document this species on St Helena, possibly because of its resemblance to and sometimes confusion with the true date palm.

The Senegal date palm (*Phoenix reclinata*) was first recorded in Jamestown Botanic Gardens in about 1809, with the name “dwarf” appended to the binomial (McCracken 2022). Melliss (1875) used the common name “dwarf date palm” and stated it was growing in both Jamestown and Sandy Bay. In Grant’s detailed 1883 account of St Helena, he refers to this palm as a fruit source, describing it from several locations. Grant used the exonym “kafir” (kaffir) date, in reference to the palm’s African origin but the term is now considered an extremely derogatory racial slur. *Phoenix reclinata* is not a dwarf palm, but poor volcanic soils may stunt its normal growth. A surviving clump of the palm reportedly is growing near the Sandy Bay School (Lambdon 2012).



8. Longwood, St Helena. Two Canary Island date palms in the upper right. Undated modern photograph. St Helena Island Information.

Historically, the European fan palm (*Chamaerops humilis*) and coconut (*Cocos nucifera*) were growing in the James Valley in 1789. The lady palm (*Rhaphis excelsa*) grew on the East India Company Plantation House Estate as recorded in 1809 and 1875. Coconuts and talipot palms (*Corypha umbraculifera*) were under cultivation in Maldivia in 1875 and 1883; coconuts were said to seldom produce perfect fruit. A single 40-foot-tall specimen of the Chilean wine palm (*Jubaea chilensis*) was thriving in 1875 at the Farm Lodge six miles south of Jamestown and producing abundant quantities of fruits (McCracken 2022, Melliss 1875). These historic plantings might no longer survive.

Additional palms cultivated in St Helena, apparently of recent introduction, are the California fan palm (*Washingtonia filifera*) and the Chinese fan palm (*Livistona chinensis*) (Lambdon 2012). A recent attempt to grow coconuts in Ruperts Bay, northeast of Jamestown, involved 100 seed nuts imported from Antigua. Nursery cultivation was unsuccessful because of destructive termites; by 2002 coconuts are no longer found on St Helena (SHII 2025).

Ascension

Ascension [07°56' S, 14°25' W] Köppen Climate: Georgetown, Bwh, hot desert; Green Mountain, Am, tropical monsoon.

Ascension is located south of the equator in the Mid-Atlantic, nearly 1000 miles from Africa and 800 miles northwest of St Helena. A dry barren desert isle with a mist covered peak, Green Mountain, Ascension was of little interest until occupied by Britain in 1815 in response to Napoleon's presence on St Helena. A garrison and settlement were created on the west side of Ascension and named Georgetown.

To support the settlement's fresh food needs, gardens were planted on Green Mountain. British interest in Ascension was stimulated by the visits of Charles Darwin in 1836 and Joseph Hooker of Kew Gardens in 1843. Struck by its sparse vegetative cover, these eminent scientists proposed a tree-planting program at the higher elevations to create a humanmade cloud forest. Begun in 1850, a tree planting effort was directed by Kew and involved the introduction of hundreds of exotic trees, shrubs, food, and industrial plant species. The tree cover captured and condensed atmospheric moisture and through a network of catchments provided water resources for mountain farming and for the island in general. The artificial cloud forest created on Green Mountain represents an early example of beneficial habitat modification and continues to supply island farms with water to produce fresh produce (Catling and Stroud 2016).

Today, Ascension Island is a combination British government military, communications, and scientific outpost without a permanent civilian population and no private property. Apart from the rotating personnel operating the government facilities, the island's civilian administration



9. Green Mountain, Ascension. Several mature date palms. Photograph 1978 by Peter Lane. <https://www.flickr.com/photos/asc1973pas/11969443083/>



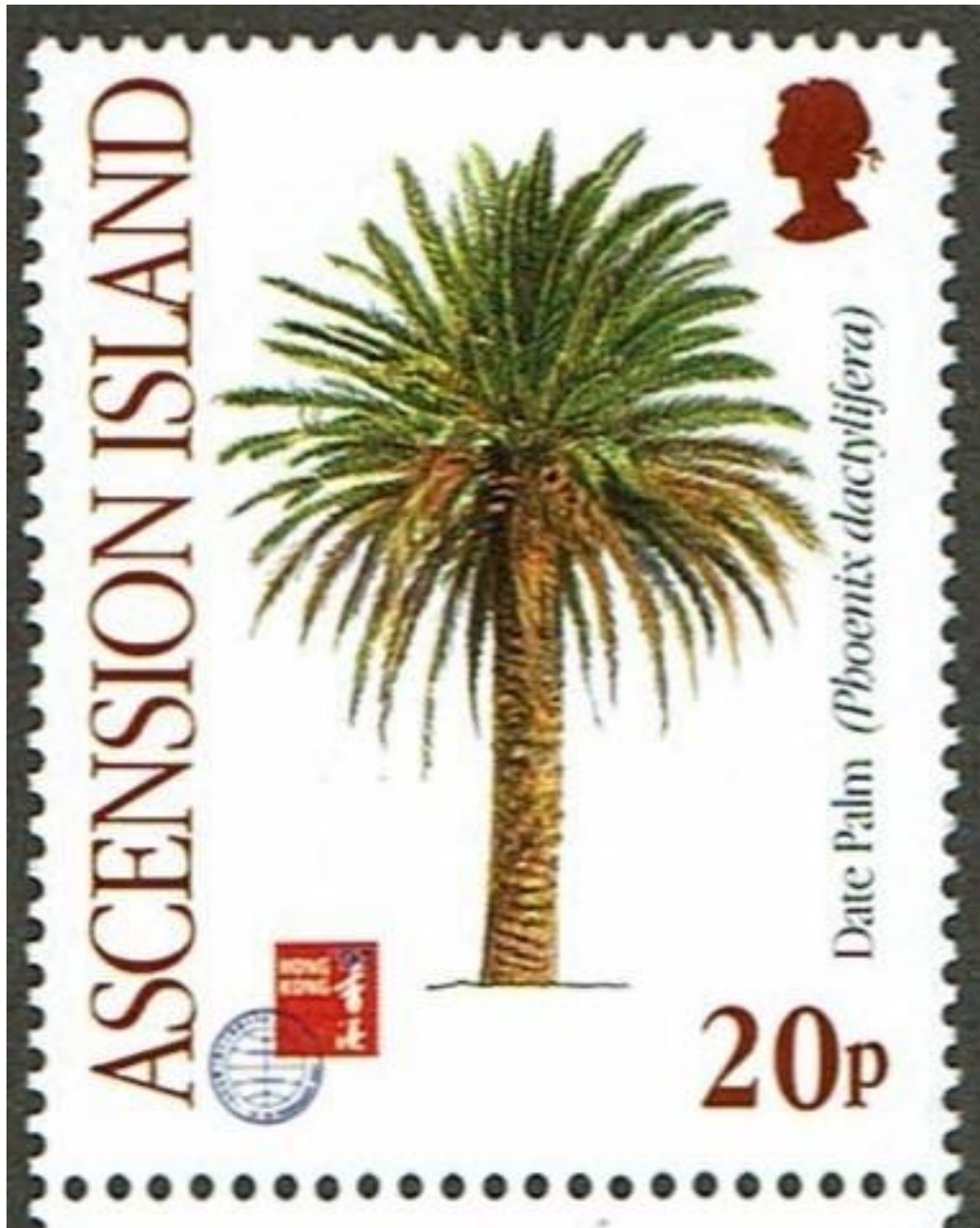
10. Ascension postage stamp, 1991. St Mary's Church, Georgetown, with young ornamental date palms.



11. St Mary's Church, Georgetown, showing larger date palms. Photograph 2020. Ascension Island Government.

provides support services by employing about 800 contract employees, many from St Helena. These individuals operate the farm at Green Mountain National Park, staff the school, hospital, shops, etc., and provide general maintenance services, including support for a modest tourism infrastructure. A notable attraction is the annual green sea turtle migration some 1400 miles from coastal Brazil to reproduce.

Exactly when date palm seeds first reached Ascension is unknown, but probably took place before 1850 (Ashmole and Ashmole 2000). In the 1850s, date palms were present at Coconut Bay on the southern part of the island and at the Green Mountain farm. Apparently, it was only a minor fruit crop. Several mature date palms, likely descended from the first introductions, are shown in a photograph from Green Mountain (**Fig. 9**). As a garden and street tree, the date is mapped as occurring in thirteen historically settled locations from the coast to the highlands; it is said seldom to produce edible fruit (Ashmole and Ashmole 2000, Lambdon et al. 2023). The island's desert climate is appropriate to date palm growth but lacks an extended period of dry weather needed to ripen fruit.



12. Ascension Island postage stamp portraying a date palm, although it more closely resembles a Canary Island date palm, issued in 1997.

In Georgetown, date palms landscape Ascension Hospital and also St. Mary's Church (**Figs. 10–11**). Comparing the size of the palms depicted on the 1991 postage stamp to the 2020 photograph reveals very slow growth rate, likely due to the infertile volcanic soils and lack of water. An Ascension postage stamp emitted in 1997 portrays the date palm (**Fig. 12**). A mature specimen



13. Cat Hill, Ascension. Swimming pool with Canary Island date palm. Photograph 1973 by Peter Lane. <https://www.flickr.com/photos/asc1973pas/11970806253/in/photostream/>

of a Canary Island date palm is growing beside a swimming pool in Cat Hill, south of Georgetown (**Fig. 13**).

A few other palms decorating the present Ascension landscape are coconut palm, California fan palm, Chinese fan palm, and royal palm (*Roystonea oleracea*). Of these, the California fan palm is likely a recent introduction (Lambdon et al. 2023). Also, the European fan palm is pictured on a 1997 Ascension postage stamp (**Fig. 14**).



14. Ascension Island postage stamp portraying a dwarf or European fan palm, although it more closely resembles a young California fan palm, issued in 1997.

Tristan da Cunha

Tristan da Cunha [37°04' S, 12°19' W] Climate Köppen: Edinburgh of the Seven Seas, Cfb, wet oceanic.



15. Edinburgh of the Seven Seas, Tristan da Cunha. Canary Island date palm in a home garden. Photograph 2023 by Kelvin Floyd.

Located some 1500 miles south of St Helena is the world's most remote inhabited island. No permanent settlement occurred until 1816 when Tristan was annexed by Britain and a garrison and village established on its north end. The island's economy is based on subsistence farming and fishing for rock lobster, the major export. Today, about 250 residents live in the sole village and capital, Edinburgh of the Seven Seas. The island's isolation is heightened by a lack of air service; provisions and passengers arrive by sea from Cape Town, South Africa, 1,750 miles to the east.

The Canary Island date palm was first recorded for Tristan da Cunha in 2023 by naturalist Kelvin Floyd, via a posting on iNaturalist (2025). Presumably, it was grown from seeds likely obtained from Cape Town. The specimen (**Fig. 15**) is immature, about 10–15 years of age; the island's climate is suitable, and it should thrive.

Conclusion

This desk study of palms in St Helena, Ascension. and Tristan da Cunha summarizes the information available from afar. A field visit to the two major islands would validate the findings and update the current status of the date and other palms. It would also afford the chance to collect descriptive data and DNA for further study of date palms that have been growing in isolation for five centuries.

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