

35 Swamp Harrier (*Circus approximans* Peale, 1848)

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Moorea, Raiatea, Tahaa, Bora Bora, Huahine and Maupiti, and the atolls of Tetiaroa and Tupai (it is not recorded on Maio and the small uninhabited island of Mehetia). It is a vagrant on the Cook Islands and the Austral Islands (French Polynesia) (Thibault and Cibois, 2017).

35.1 Common Names

Swamp Harrier, Australasian Harrier, Pacific Harrier (English), Busard de Gould (French), Manu'amu moa (Tahitian).

35.2 Nomenclature

The Swamp Harrier (*Circus approximans* Peale, 1848) was previously considered a subspecies of the Western Marsh Harrier (*Circus aeruginosus* Linnaeus, 1758). Two subspecies are currently recognized: *C. a. approximans* Peale, 1848 and *C. approximans gouldi* Bonaparte, 1850 (Debus and Kirwan, 2018). The Swamp Harrier belongs to the family Accipitridae and is one of a few raptors considered invasive.

35.3 Distribution

The Swamp Harrier is native to Australia (including Tasmania), New Zealand (also resident in the Chatham Islands), Fiji, New Caledonia, Tonga and Vanuatu (Fig. 35.1). It is a regular visitor to islands at the margin of its range including the Kermadec Islands, Norfolk and Lord Howe Islands, and Wallis and Futuna Islands. It is considered a vagrant in the Subantarctic Islands and isolated islands in western Polynesia (Debus and Kirwan, 2018).

The Swamp Harrier has been introduced and is considered an invasive on the Society Islands (French Polynesia, South Pacific), including the high volcanic islands of Tahiti,

35.4 Description

The Swamp Harrier is a brown harrier, 48–61 cm long, with a wingspan of 118–145 cm and a body mass of between 0.4 and 10 kg (Fig. 35.2). It has round-tipped and well-fingered wings, and a long narrow tail. The females are darker and more rufous below, compared with males (Debus and Kirwan, 2018).

35.5 Diet

In its native range, the Swamp Harrier feeds mostly on small mammals and carrion. It also feeds on birds and eggs, reptiles, amphibians, fish and large insects (Debus and Kirwan, 2018). In its introduced range, it feeds mainly on native birds (seabirds and land birds), including endemic species (Leopold, 1965; Anon., 1994; Wilcox and Spotswood, 2011; Faulquier, 2015).

35.6 Introduction and Invasion Pathways

The Swamp Harrier was first introduced to Tahiti c.1885 by the German Consulate to control rats (Holyoak and Thibault, 1984). It rapidly colonized the other islands of the Society Archipelago during the 20th century (found in Bora Bora in 1922) and was considered 'noxious' (as it eats chickens, thus its Tahitian name) and was hunted between the 1900s and 1930s. Vagrant birds are not uncommon, and its spread to the archipelagos close to the

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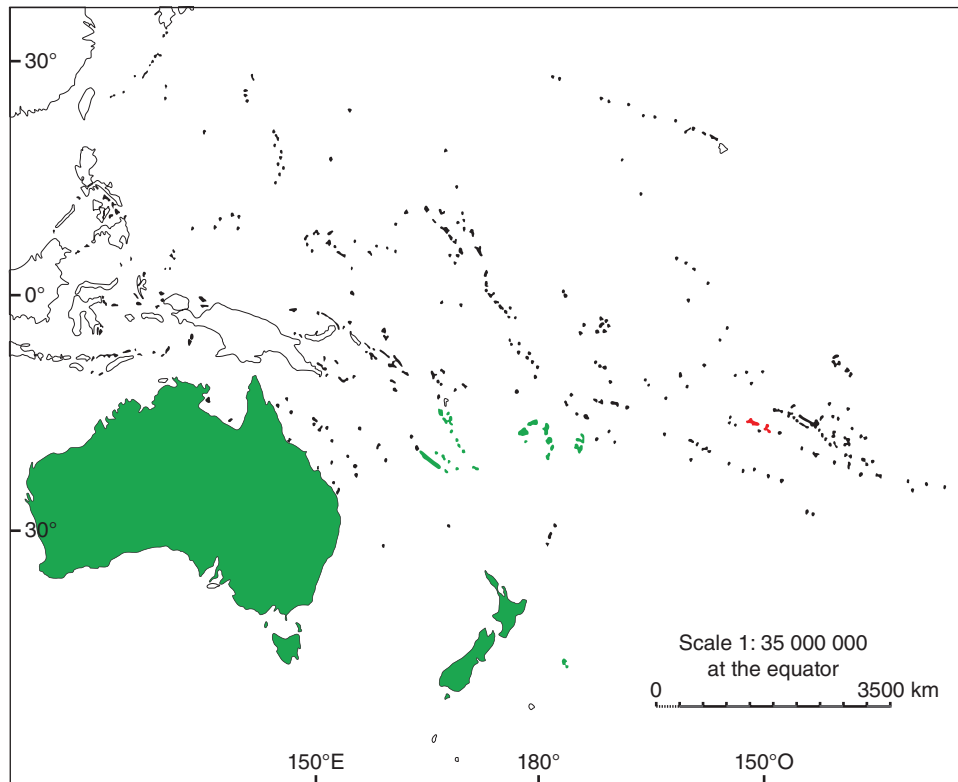


Fig. 35.1. Distribution of the Swamp Harrier (*Circus approximans*) showing its native (green) and non-native (red) ranges.



Fig. 35.2. An adult Swamp Harrier. (©Photograph: Frédéric Jacq.)

Society Islands is possible in the near future (Thibault and Cibois, 2017).

35.7 Breeding Behaviour

In its native range, Swamp Harrier breeding takes place between September and February. Their nests are built on the ground or in low trees. Their clutch size is three to four eggs and their incubation is between 31 and 34 days. Their fledglings leave the nest at 6–7 weeks and are fed by the parents for

up to 6 weeks (Debus and Kirwan, 2018). No breeding behaviour has been recorded in its introduced range.

35.8 Habitat

The native habitat of the Swamp Harrier includes forests, shrublands, wetlands, marshes, grasslands, croplands and pastures, from sea level up to 1700 m. In its introduced range on Tahiti, Moorea and Raiatea, it forages more often over open ridges (up to 1900 m on Tahiti) than in valleys. On the lower islands, it is also seen foraging on the shore and frequently near villages. It also occasionally forages in the understorey of large-canopy trees, and has been observed in urban areas of Tahiti (personal observation).

35.9 Impacts

The Swamp Harrier has had strong negative impacts on seabird colonies (including petrels, e.g. *Pseudobulweria rostrata*) and on native land birds. It is probably one of the drivers leading to the extinction of the Polynesian Imperial-pigeon (*Ducula aurorae*) in the Society Islands. The low density of endemic fruit doves (*Ptilinopus* spp.) could also be due to Swamp Harrier predation (Thibault and Cibois, 2017). As with the Great Horned Owl (*Bubo virginianus*) in the Marquesas Islands, the introduction of this raptor has had little apparent impact on the control of rats.

35.10 Control

The Swamp Harrier has no natural predators in its introduced range except for humans. Few control methods have been tested, except using guns to shoot them (personal observation).

35.11 Notes

The introduction of the Swamp Harrier to areas with avifauna devoid of raptors, like that of the Great Horned Owl to the Marquesas Islands, has had major consequences on the native birds. Additionally, the Swamp Harrier's dispersal capacity represents a high risk for the avifauna of nearby archipelagos.

35.12 References

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