## The Return of the Purple Martin in British Columbia

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### ABSTRACT

In British Columbia, purple martins (*Progne subicolis*) have increased from a few pairs nesting on southern Vancouver Island in the 1980s, to more than 140 pairs on Vancouver Island and the lower mainland in 1998. The increase is attributed to a volunteer-run nest box program initiated in the 1980s and carried on today. Threats to the species' recovery include volunteer "burnout," small numbers, and the decaying condition of pilings on which nest boxes are placed.

**Key words:** nest boxes, *Progne subis*, purple martin, Vancouver Island.

## HISTORY AND STATUS

The purple martin in southwestern British Columbia is regarded as a separate subspecies (*Progne subis arboricola*) from the rest of the Canadian population (*P. s. subis*; Behle 1968, Phillips 1986, Cannings 1998). The *subis* subspecies is only known in British Columbia as a casual wanderer in the northeastern part of the province (Munro and Cowan 1947, Campbell et al. 1997, Cannings 1998).

Historically, the British Columbia purple martin population reached a low of perhaps fewer than 5 pairs in about 1985 (Fraser et al. 1997, Copley et al. 1999). Low population numbers resulted in the species being placed on the provincial Red List (Fraser et al. 1999), and it is a candidate for threatened status under the British Columbia Wildlife Act. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has not addressed the *arboricola* subspecies.

Reasons for the decline of purple martins are not known, but it is speculated that they may have experienced considerable competition from introduced species, especially European starlings (*Sturnus vulgaris*; Fraser et al. 1997, Copley et al. 1999), reduction in suitable nest sites associated with modern building construction (Campbell et al. 1997), or that the species may naturally fluctuate in southwestern British Columbia as a result of being at the north edge of its range (Campbell et al. 1997).

Formerly, the species was found on southern and eastern

Vancouver Island and the lower mainland (Campbell et al. 1997, Fraser et al. 1997). However, it was extirpated from the lower mainland by the 1950s, leaving only a small breeding population on Vancouver Island (Campbell et al. 1997). Prior to the 1980s, this species nested in natural cavities, holes in buildings, and holes in pilings (Campbell et al. 1997, Fraser et al. 1997).

## **CURRENT TREND**

In the mid-1980s, a nest box program was started for purple martins by members of the Victoria Natural History Society at Cowichan Bay on southern Vancouver Island (Copley et al. 1999). Since that time, expansion of the nest box program has resulted in groups of birds nesting in at least 12 locations in southwestern British Columbia (Fig. 1). In 1998 at least 140 active nests were found (Fig. 2). Breeding was confirmed in the lower mainland in 1994 (Plath 1994), and in 1997 there were at least 14 active nests at Maplewood Flats and Rocky Point, both in North Vancouver (Copley et al. 1999).

The pattern of decline and recovery seen in British Columbia is similar to that seen in Washington and Oregon (Brown 1997, Copley et al. 1999).

# CURRENT DISTRIBUTION IN BRITISH COLUMBIA

On Vancouver Island, purple martins are known to breed at Cowichan Bay, Esquimalt Harbour, Ladysmith Harbour, Nanaimo Estuary, Newcastle Island, Nanoose Bay, Campbell River Estuary, Oyster Bay, Sooke Harbour, and Victoria's West Bay Marina. On the mainland, they breed at Maplewood Flats and Rocky Point, both in North Vancouver.

## CURRENT THREATS

Despite the encouraging trend in numbers, the purple martin is still considered to be at risk in British Columbia (Fraser et al. 1999). The number of individuals is still very

small, most of the nest boxes have been placed on decaying pilings, which will disappear over the next decade or so, and maintenance of the next box program is being carried out by a handful of volunteers. More than 90% of the boxes in British Columbia were built and installed and are maintained by a single volunteer! Volunteer "burnout" is a serious threat to the program that maintains this species.

To assist with the expansion of the program, the provincial Wildlife Branch has produced a brochure that outlines the

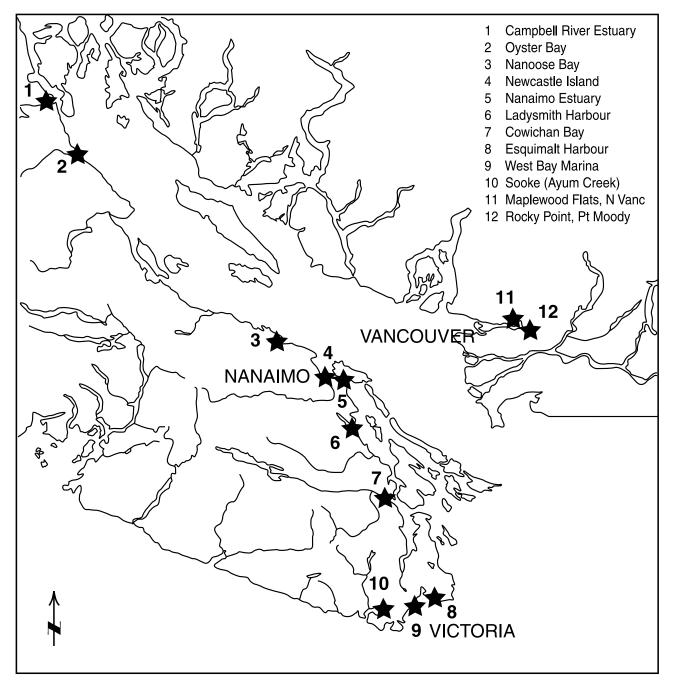
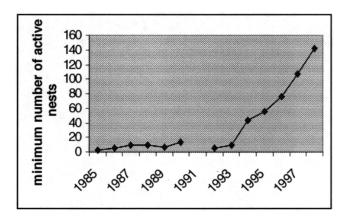


Figure 1. Location of known nest sites of purple martins in British Columbia. Updated from Fraser et al. (1997).



**Figure 2.** Number of known active nest sites of purple martins in British Columbia from 1985 to 1998. Nest information for 1991 is unavailable. Updated from Copley et al. (1999).

program for purple martin and includes plans for the construction of nest boxes for the species and guidelines for starting new colonies (Pridgeon 1997).

## **NEXT STEPS**

A number of steps for the management of purple martin in British Columbia are outlined in Fraser et al. (1997). At this stage the following are considered to be critical to the maintenance of the species in British Columbia:

- Production of a status report and a listing decision by COSEWIC.
- Development of a recovery and research strategy for the subspecies in Canada.
- Active fostering of stewardship groups to increase the number of nest sites and available nest boxes.
- Acquisition of support for the handful of volunteers that are currently working to recover this subspecies.

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