

INTRODUCTION

This is the fourth and final volume on the avifauna of British Columbia; it completes a discussion of the passerine birds of the province that began in Volume 3. Coming some 10 years following the publication of Volumes 1 and 2 (the non-passerine birds), it is the culmination of over 25 years of effort by the authors and significant contributions from colleagues around the world and thousands of volunteers (Fig. 1) throughout British Columbia.

The methodologies used in the preparation of this work have previously been described (Volume 1, page 146, and Volume 3, page 13) and will not be repeated here.

Because of the length of time between the publication of Volumes 1 and 2 (1990) and this final volume, we have included a chapter called “Additions to the Avifauna of British Columbia, 1987 through 1999.” There we list 28 species new to the province that were reported over that period. Some species, such as Manx Shearwater, Crested Caracara, Xantus’s Hummingbird, and Least Tern are new occurrence additions to the avifauna of the province. Others, such as Northern Fulmar, Baird’s Sandpiper, Franklin’s Gull, and Black-legged Kittiwake (Fig. 2), now breed in the province. One species, Pacific Golden-Plover, has been elevated from subspecies to full species status due to taxonomic changes.

Beyond the scope of the chapter are the many new changes in numbers, distribution, and results of research that contribute to our current knowledge and status of birds in the province. For example, the Flammulated Owl, Trumpeter Swan, and Black Tern (Fig. 3), have ranges in the province that are much greater than was previously known. And for others, such as the Barrow’s Goldeneye and Marbled Murrelet, research has provided new information significant to the conservation and management of the species. In the case of the goldeneye, mature trembling aspen forest that provides nesting cavities is being harvested at an incredible rate to make hardwood products for the world market. In the case of the murrelet, an ornithological enigma was solved in 1991 with



Figure 1. Over 11,000 volunteers contributed information to the data bases that were used to prepare *The Birds of British Columbia*. J.E. Victor Goodwill and Margaret E. Goodwill have been among our most consistent and supportive contributors (Victoria, 15 March 2000; R. Wayne Campbell).



Figure 2. Adult Black-legged Kittiwake with chick at nest ledge (Gjelpruvaer, Norway, 11 July 1994; R. Wayne Campbell).



Figure 3. Over the past 2 decades, the breeding distribution of the Black Tern has expanded northward and westward in British Columbia (south of Prince George, 13 June 1998; R. Wayne Campbell).

the discovery of the first murrelet nest for British Columbia in old-growth forest along Walbran Creek.

A final section, “Synopsis: The Birds of British Columbia into the 21st Century,” summarizes significant information on the avifauna of the province from all 4 volumes. Here we discuss aspects of the biodiversity, ecological distribution, and patterns of change we have noted along with rare, threatened or endangered species and those species experiencing long-term changes in numbers. The national and international significance of select species and our responsibilities to ensure that viable populations survive for future generations are also covered, along with future management needs. That is followed by our thoughts on some new philosophies, concerns, and conservation challenges we believe will play a role in the future of the birds of the province.

Finally, we end much as we began, by respectfully reminding the reader

that this [has truly been] a cooperative work; if he fails to find in these volumes anything that he knows about the birds, he can blame himself for not having sent the information to

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