

***HOTSPOTS:
BIRD SURVEY OF MENDENHALL
WETLANDS
APRIL 2002 to MAY 2003***



Robert H. Armstrong, Richard L. Carstensen, and Mary F. Willson

***Juneau Audubon Society
and
Taku Conservation Society
2004***

Some of the data for this paper were gathered by the authors under a contract between Discovery Southeast and the U.S. Fish and Wildlife Service (FWS), and were provided to FWS in a report entitled "Bird use of the Mendenhall Wetlands April 2002 to May 2003." The authors have included data from that report in this paper, along with additional information they have collected. Any conclusions and recommendations presented herein are the authors' personal views, and have not been endorsed by Discovery Southeast.

The Juneau Audubon Society and Taku Conservation Society provided financial support for the printing and distribution of this report. All recommendations in this report are those of the authors and have not been officially endorsed by the Juneau Audubon Society.

Contents

Introduction	2
1 Methods	2
Study site and field methods for hotspots	2
GIS mapping of data	3
Phenology	3
Connections	4
2 Overview of diversity and abundance on the wetlands	4
3 Summary maps and charts	5
4 Glacial rebound, vegetation and birds	10
5 Hotspot descriptions	17
Mendenhall River mouth (r05)	17
Fritz Cove (r06)	18
Western mudflat sand lance area (r08)	19
Lower Fish Creek estuary (f08)	20
Upper Fish Creek estuary (f01)	21
Salmon Creek estuary (s01)	22
Otter Pond (a01)	23
Sedge flats west of Otter Pond (a08)	24
ERA heliport (e02)	25
Western Channel (f09)	26
Upper Mendenhall River (r02, 13, 03, 07 and 04)	27
Wigeon Ponds (p02)	28
Phalarope Slough (a10)	29
Junk Car Slough (a02)	30
Miller-Honsinger Pond (a04)	31
Float Plane Basin Finger Ponds (a03)	32
Auke Lake (x01)	33
Twin Lakes (t02)	34
6 Comparisons with Cain et al. 1988	35
7 Phenology and distribution	36
8 Connections with the rest of the world	44
9 Animal food resources on the wetlands	45
Fish	45
Mammals	48
Invertebrates	48
10 Synthesis and recommendations	51
Shorebirds	51
Past and pending habitat loss	53
Birds and airplane safety	53
Dogs and birds	56
Hunting	57
Infrequently surveyed areas of the wetlands	58
Further research needs	59
Acknowledgments	59
Literature Cited	59
Appendices	61
Appendix A Common and scientific names	61
Appendix B Species distribution maps	62
Appendix C Phenology tables for all refuge species	65