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Chain Islets Important Bird Area

Chain Islets IBA Conservation Plan

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BC Important Bird Areas Program

1. Introduction

2. The IBA program

The IBA program is an international initiative co-ordinated by BirdLife International, a partnership of member-based organizations in over 100 countries seeking to identify and conserve sites important to all bird species worldwide. Through the protection of birds and habitats, they also promote the conservation of the world's biodiversity. There are currently IBA programs in Europe, Africa, the Middle East, Asia, and the Americas.

The Canadian BirdLife co-partners are the Canadian Nature Federation (CNF) and Bird Studies Canada (BSC). The Canadian IBA program is part of the Americas IBA program which includes the United States, Mexico, and 17 countries in Central and South America.

The goals of the Canadian IBA program are to:

- 1. identify a network of sites that conserve the natural diversity of Canadian bird species and are critical to the long-term viability of naturally occurring bird populations;
- 2. determine the type of protection or stewardship required for each site, and ensure the conservation of sites through partnerships of local stakeholders who develop and implement appropriate on-the-ground conservation plans; and
- 3. establish and support ongoing local involvement in site protection and monitoring.

IBAs are identified by the presence of birds falling under one or more of the following internationally agreed-upon categories:

- 1. Sites regularly holding significant numbers of an endangered, threatened, or vulnerable species.
- 2. Sites regularly holding an endemic species, or species with restricted ranges.
- 3. Sites regularly holding an assemblage of species largely restricted to a biome.
- 4. Sites where birds concentrate in significant numbers when breeding, in winter, or during migration.

3. IBA Site Information

The Chain Islets are located in Oak Bay less than 2 km from Gonzales Point in the suburbs of Victoria on Vancouver Island. The Chain islets include Great Chain Island and a cluster of at least 18 small islets and rocks in Mayor Channel about midway between the southeastern shore of Vancouver Island near Victoria and Discovery and Chatham islands to the east (Figure 1). The low rounded islets are rocky and barren except for Great Chain Islet that supports a nearly continuous grass and herbaceous cover with occasional shrub thickets. Shoreline features include a few steep faces, rocky outcroppings, boulders, crevices, wave-cut chasms and small gravel beaches. The islets are surrounded by shallow water from which many rocky reefs emerge. Intertidal and subtidal communities are rich and diverse. The proposed IBA includes the surrounding shallow marine waters included in the B.C. Provincial Ecological

Reserve in a radius of approximately 700 m approximately 160 hectares in total (the area of the islands totals approximately 7 ha).

4. IBA Species Information

Chain Islets and Great Chain Island is a site of global importance, supporting a significant breeding population of Glaucous-winged Gulls, and a migratory population of Brandt's Cormorants (Table 1). Surveys in 1986 and 1987 recorded 2432 pairs of Glaucouswinged Gulls The colony of Glaucous-winged Gulls on the Chain Islets is the largest in British Columbia, and together with the other two similar sized colonies in the Strait of Georgia, Mandarte and Mitlenatch, these three sites support almost half of the breeding population of the Strait of Georgia and a quarter of the breeding gulls in British Columbia. In fall, up to 2,000 Brandt's Cormorants have been recorded in the area, which is over 2% of the estimated world population (Campbell et al. 1990b). A Pelagic Cormorant colony is also present at this site. In 1987, the population peaked at 248 pairs (Vermeer and Devito 1989), but since that time has steadily declined to only 7 pairs in 1999 (M. Lambert, pers, comm..). Additionally, 510 pairs of Double-crested Cormorants, which in British Columbia breed only in the Strait of Georgia, were recorded nesting in the Chain Islets (Vermeer et al. 1989). This is the second largest colony of this species in British Columbia, Pigeon Guillemots and Black Oystercatchers also nest on the islets, but estimates of their breeding numbers do not meet the threshold of an IBA (74 birds, and 4 paris, respectively; Emms and Morgan 1989, Vermeer et al. 1989). Harlequin Ducks and other marine birds occur seasonally among the reefs and islands.

Table x. Species or groups meeting IBA criteria for Chain and Great Chain Islets

Species or Groups meeting IBA criteria	Season*		Approximate % of population ³	Sig.	Provincial rankng
Brandt's Cormorant	FM	2,000	2 (G)	G	Blue
Glaucous-winged Gull	В	2432 pair (1986-1987)	1 (G)	G	

^{*}FM = fall migration, B = breeding

Species Accounts

Brandt's Cormorants

Brandt's Cormorants are restricted to the Pacific coast of North America. They breed on bare rocky islands in colonies that are shared with Pelagic Cormorants and Glaucous-winged Gulls from south-coastal Alaska south to central California and the Baja. Brandt's Cormorants winters mainly from south coastal BC southward. During the winter they frequent bays, lagoons, harbours and narrows with strong currents adjacent to nearby rocks or islets that provide suitable roosting habitat. Spring movement of Brandt's Cormorants occurs from mid-March to mid-may. Autumn movement from breeding colonies along the costal areas in the US occurs in July and August. In the wintering areas of BC, there are pronounced seasonal movements that appear to be associated with changes in the availability of fish. Large concentrations of birds congregate in areas of spawning Pacific Herring (Vermeer and Ydenberg 1989, Haegele 1993, Campbell et al. 1990a).

Double-crested Cormorant

Double-crested Cormorants breed from south-western Alaska, central Alberta, James Bay and Newfoundland south to Mexico and the Bahamas. In BC Double-crested Cormorants nest in

colonies often with Pelagic Cormorants that area located on bare areas of rocky islands from Southern Vancouver Island north to Franklin Island ??? and east to Christie Islet. Nest sites are constructed on the ground on bare rock, but trees, driftlogs, pilings and other artifical structures have also been used (Vermeer et al. 1989, Campbell et al. 1990a). Clutch initiation ranges from April 20 to September 2 with most (54%) recorded between June 22 and July 10. Double-crested Cormorants lay between 1 and 11 eggs with most nests having 2-4 eggs which are incubated for approximately 28 days. The fledgling period is 35-42 days (Lewis 1929 *in* Campbell et al. 1990a). During the summer Double-crested Cormorants tend to feed on fish obtained from deep water such as gunnels and shiner perch (Robertson 1974 *in* Campbell et al. 1990a).

During the non-breeding season, Double-crested Cormorants occur in marine habitats such as bays, inlets, harours, lagoons and esturaires. It is also visits coastal freshwater lakes on southern Vancouver Island and the Fraser Lowlands.

Seasonal movements on the inner coast not well known. There is an apparent influx of migrant birds in early September, however, they are widely distributed during the winter. Birds begin to congregate in February and March during the spawning of Pacific herring and Pacific sandlance. The spring movement occurs from mid-March to late May, but is most pronounced during late April and early May.

Glaucous-winged Gull

Glaucous-winged Gulls are one of the most common gulls in BC. They breed from the southern Bering Sea and southern Alaska south along the Pacific coast to north-western Washington (Campbell et al. 1990b). Despite the fact that this species is present along he coast throughout the year there is a discernible seasonal movement of individuals. In spring, gulls move from wintering areas between late March and early May. In the autumn movement occurs between late September and late October. These seasonal movements coincide with the herring spawning season (spring) and this salmon spawning season (fall). During winter, this species is widely distributed along the entire BC coast in various habitats including bays, harbours, estuaries, and areas where spawning salmon, eualchon and Pacific herring are found. They are also often found in large numbers over schools of sandlance and Pacific herring (Vermeer and Ydenberg 1989, Campbell et al. 1990b). Over the past 50 years, the population of this species has increased up to 3.5 times in size. The total breeding population in BC was estimated to be approximately 25,000 pairs in 1987 (Campbell et al. 1990b).

5. Other elements of high conservation value

These islands also support natural Gulf of Georgia meadow communities. There are well developed patches of spring flowers and species rare in B.C. such as golden Indian paintbrush Castilleja levisecta), California buttercup Ranunculus californicus), snakeroot sanicle Sanicula arctopoides (REFF). These meadows are of limited distribution in B.C. and have been severely disturbed or eliminated in most other locations. The Chain Islets are also a regular summer haul out site for Harbour Seals.

6. Land ownership and use

- 6.1 Historical
- 6.2 Present

7 Conservation management achieved at the IBA site

At present this area is part of the Ecological Reserves Program administered by B.C.