



The Ospreys of the West Kootenays

A comparison to the Eastern Georgian Bay Population



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Natural History of Osprey

- cosmopolitan
- occurs in tropical and temperate parts of all continents, except Antarctica
- Canadian populations migrate to southern USA, south to Chile and Argentina
- 'mate for life'

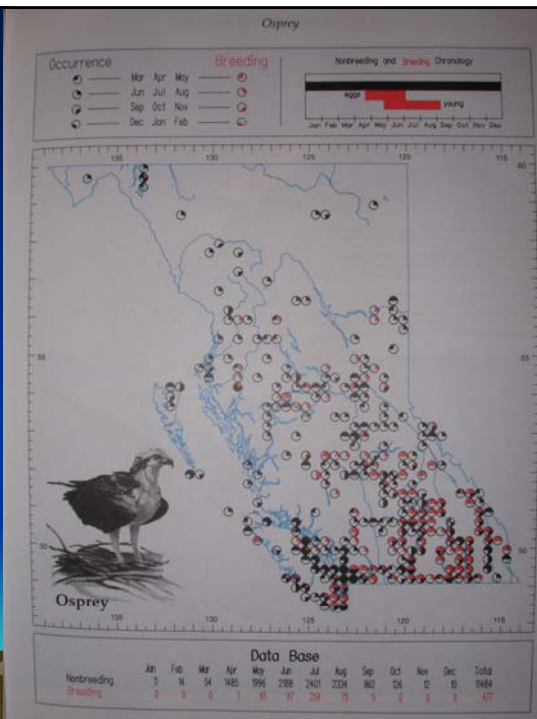


Ecology of BC Populations

- found throughout province, mainly near fresh water
- arrive March-April, leave Sept.-October
- centre of abundance appears to be West Kootenays
 - 140 nesting pairs – possibly the most concentrated in the world
- not compatible with Bald Eagles



Distribution in BC



Nesting in BC

- of 395 nests
 - 56% were in trees; 64% of those dead
 - 44% were on man-made structures
 - wooden pilings (53%)
 - cross-members of wooden power poles (32%)
 - navigation lights in lakes (8%)
 - cranes, microwave dishes, wharf, chimney



BC Nesting

- Of 46 clutches most were between 15-22 May
- Of 39 clutches average number 3 eggs
- Incubation period is about 38 days
- Of 419 broods the average dates were between June 27-July 20
- Of 412 broods, most had 2 young
- Fledging period 44-59 days



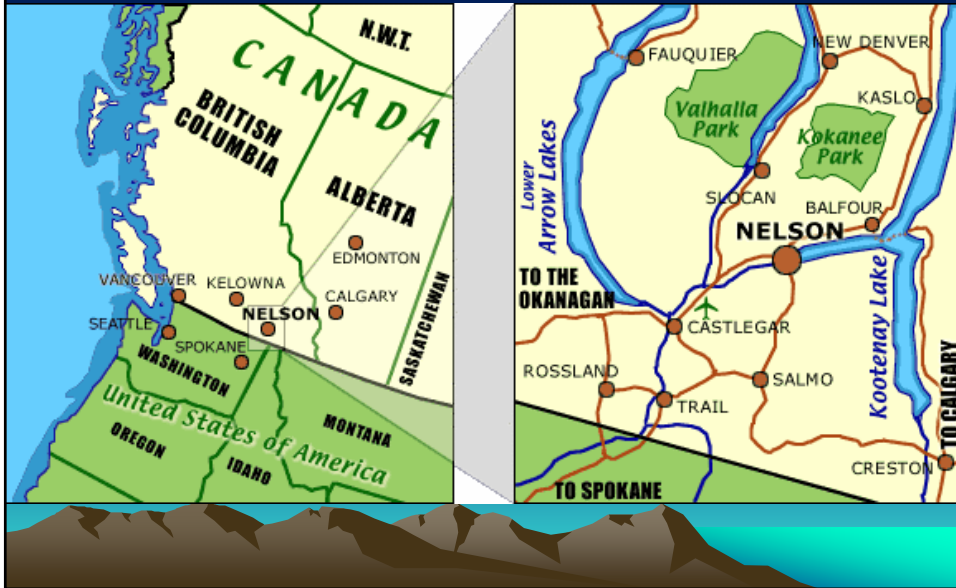
Comparison of BC to Ontario

	BC	Ontario
Spring arrival	(February) March - April	April – May
Incubation period (days)	38	32-33
Hatch to fledge period (days)	44-59	52-53

Where are the West Kootenays?



The Study Area



Project Background

- 1978, Madge Hollington monitored nests along the Kootenay River; log boom pilings were prime nest sites
- 1987-97 Balfour to Nelson area studied by Steeger (M.Sc.) and Machmer (B.Sc. honours) (SFU)
- 1991, Castlegar to Trail was added to the study area
- 1991-96 CWS funds toxicology study thru SFU
- results: 1 honors thesis, 3 M.Sc. and 7 publications
- 1997 “The Hathaway Sisters” begin study

The Hathaway Sisters

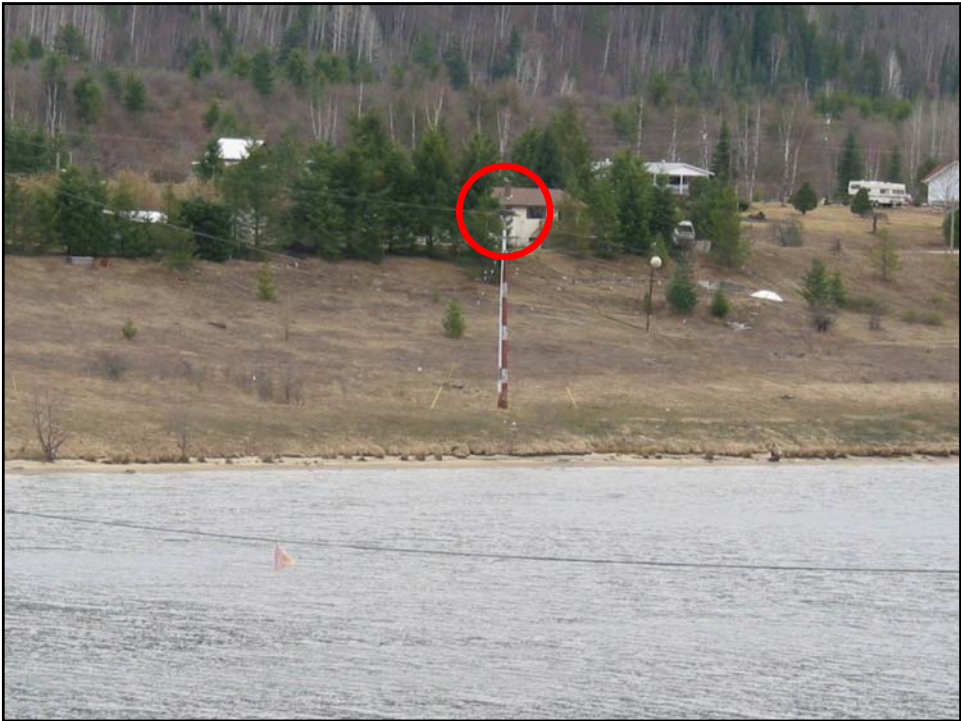


Osprey of the West Kootenays

- Purpose: to study and survey the population between Balfour and Trail
- Methods:
 - nests are viewed from a distance, using binoculars and/or a spotting scope
 - observations made at least once a month from mid-April to early September
 - nest record cards are filled out and submitted to the BC Nest Record Scheme in Victoria
 - data were collected in 1997, 1998 and 1999











Results – West Kootenays

Parameter	1997	1998	1999
occupied nests	51	99	46
productive nests	33	65	26
% productive nests	65	66	57
# juveniles	43	96	40
average # juvs/productive nest	1.3	1.5	1.5

West Kootenays vs. Georgian Bay 1997-99

Average:	WK	GB
# nests monitored	65	54
# productive nests	41	33
% productive nests	63	61
# chicks seen	60	39
# chicks/productive nest	1.46	1.18

Challenges

- volunteer availability, training and access
- equipment and training required to establish and maintain nest platforms
- co-ordinating research and reporting results

Opportunities

- increasing public awareness about Ospreys and the greater ecosystem
- conservation of a once threatened species
- monitoring a potential early warning of declining ecosystem health

Co-operative Partnerships



- Ontario Parks
 - Central Zone Monitoring Strategy
 - Osprey, Prairie Warbler, SAR, *et al.*?
- Breeding Bird Atlas Projects
- Nest Records Schemes

Questions ???

