The BC-Yukon Nocturnal Owl Survey 2006

Northern owls on the rebound?

Inside...

This year 102 participants did 105 owl surveys along 96 routes across British Columbia and Yukon, detecting 291 owls, up once again from the 269 heard last year and 236 the year before. Northern Saw-whet Owl numbers levelled off somewhat, with 121 heard, an average of 0.81 per 10-stop route. Great Horned Owl began to climb out of the bottom of the 10-year snowshoe hare cycle; 79 were heard this year, all but 2 of them in the BC Interior and southern Yukon.

Boreal Owl numbers also started to increase from the bottom of their cycle. Thirty-two were heard this year: 24 in the Yukon, 7 in northern BC and 1 in the Kootenays. The number of Barred Owls reported has remained remarkably constant over the past three years, with 31 heard this year, 30 in 2005 and 33 in 2004.

Juvenile Western Screech-Owl found injured along Shuswap River. *Photo: Helen Davis*

Western Screech-Owl numbers were also similar to last year, with 14 detected, five of them in the southern Interior and the rest on the coast. Of particular interest were two found by Peter Davidson in the Rocky Mountain Trench south of Fort Steele. The habitat in the East Kootenay seems to be ideal for this species but very few have ever been reported there.

Of the rarer or less widely distributed species, Kathleen McEachern and Jean Sawatzky had a single Barn Owl on their Pitt Polder route and Kris Andrews heard a Northern Hawk Owl at Fletcher Lake. The latter bird was giving its long trill call, a rarely heard territorial vocalization. Three Great Gray, four Northern Pygmy and five Long-eared Owls were also tallied.

The top survey for numbers of owls was Coalmine, near Prince George, where Doug Wilson encountered 10 Northern Saw-whet and 5 Barred Owls in 20 stops, while Chris and Stu Withers had the best average, with 10 owls (3 Great Horned and 7 Boreal) heard on 10 stops along their route at Tarfu Creek, Yukon.

----Dick Cannings, survey coordinator

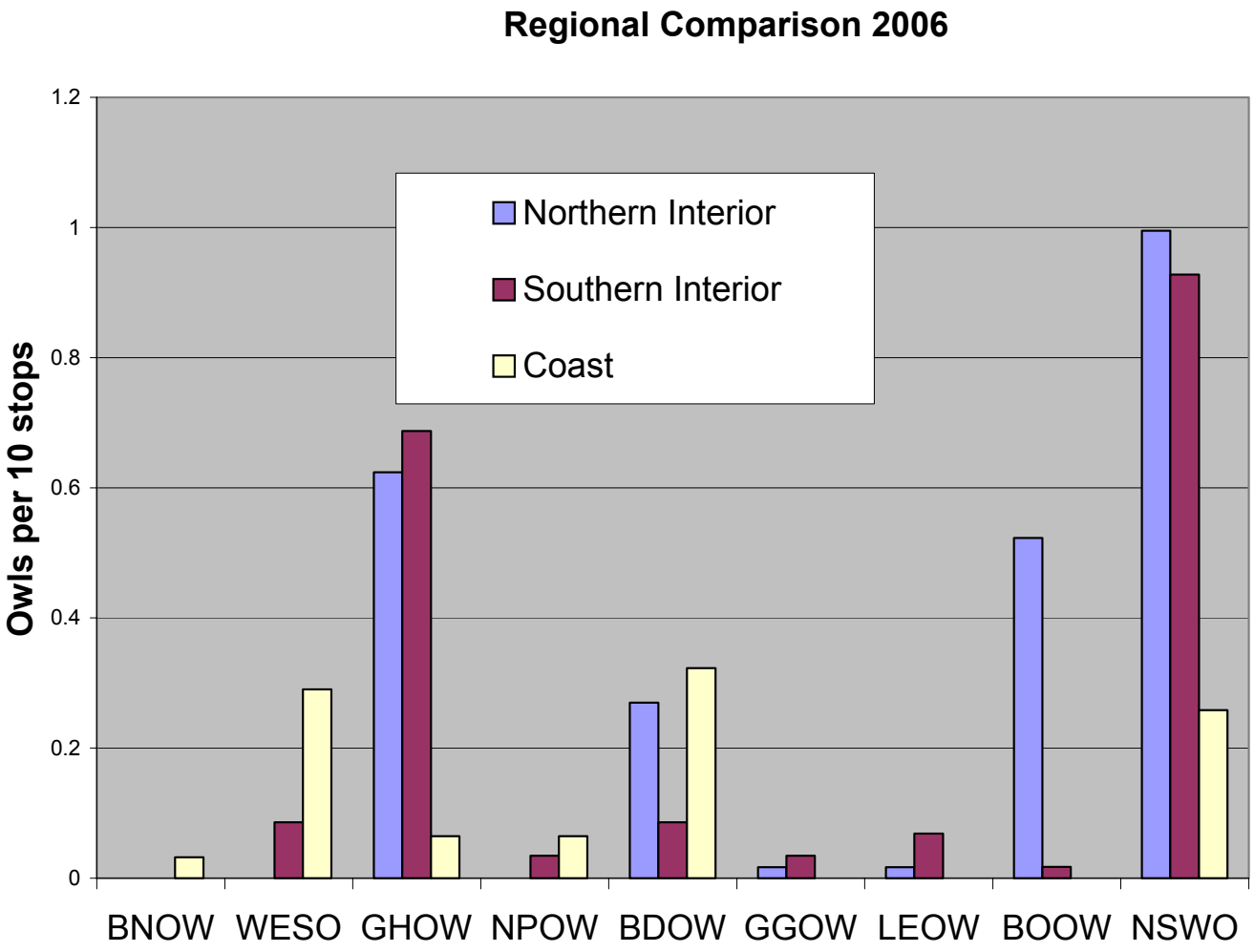
Thanks to 102 owlers:

Ken Anderson, Libby Anderson, Kris Andrews, Cathy Antoniazzi, Janice Arndt, Libby Avis, Rick Avis, Jeremy Ayotte, Ron Barre, Bruce Bennett, Michael Bezener, Jack Bowling, Dick Cannings, Lynne Cannon, Bob Chapman, Riley Chapman, Paul Colton, Larry Cowan, Loyd Csizmadia, Ed Dahl, Monica Dahl, Chris Dale, Peter Davidson, Rick Dawson, Bruce Dobrowolsky, Frank Doyle, Dan Dunlop, Helen Dunlop, Eva Durance, Carol Fairhurst, John Field, Lil Fletcher, Trevor Forder, Wayne Giles, Mike Gill, Susan Gower, Larry Halverson, Denise Hearn, Phil Henderson, Paul Jones, Ruth Jones, Andrew Karassowitch, Gerald Kerr, Joan Kerr, Nancy Krueger, John Lambie, Vi Lambie, Laird Law, Jean Legare, Nicky Luck, Tanya Luszcz, Gordon Marshall, Wendy Marshall, Kathryn McCourt, Sue McDonald, Kathleen McEachern, Bob McKay, Chris McKay, Erica McLaren, Bruce McLean, Maurisa Melancon, Volker Michelfelder, Bruce Morgenstern, Pearl Morgenstern, Ted Murphy-Kelly, Heather Neville, John Neville, Ann Nightingale, Mark O'Donoghue, Molly O'Donoghue, Dorothy Parks, Todd Powell, Larry Prosser, Anne Redfearn, Trish Reid, Gillian Richardson, Trevor Richardson, Keith Riding, Margaret Riding, Laurie Rockwell, Marj Rodwell, Greg Ross, Ian Routley, Sonja Saksida, Mike Saul, Jean Sawatzky, Madelon Schouten, Gail Spitler, Elsie Stanley, George Stetkiewicz, John Theberge, Mary Theberge, Russ Tkachuk, Helga Vrabac, Margaret Waring, Michaela Waterhouse, Wayne Weber, Rita Wege, Doug Wilson, Chris Withers, Stu Withers, Ken Wright.

Short-eared Owls are crepuscular birds that are not easily monitored. *Photo: Ralph Hocken*

REGIONAL COMPARISON

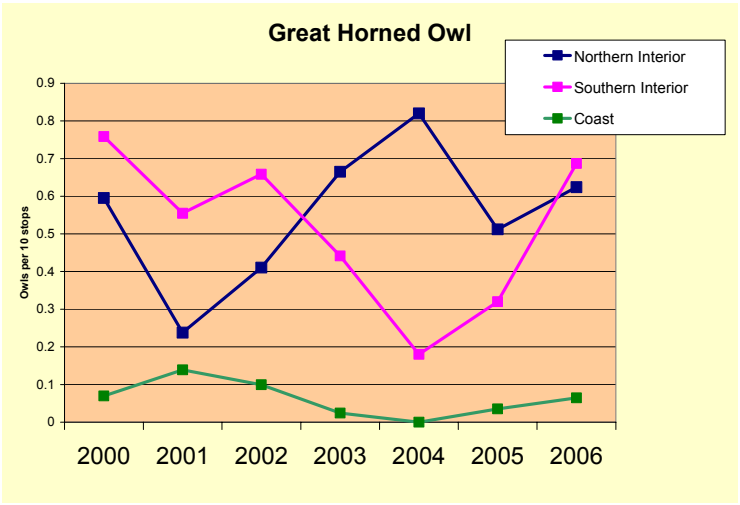
The chart below presents a comparison of the relative abundance of each species in the Northern Interior (including the Yukon), the Southern Interior (Thompson-Okanagan-Kootenay) and the BC Coast. Note that the values on the coast have not been adjusted to reflect the playback protocol there.

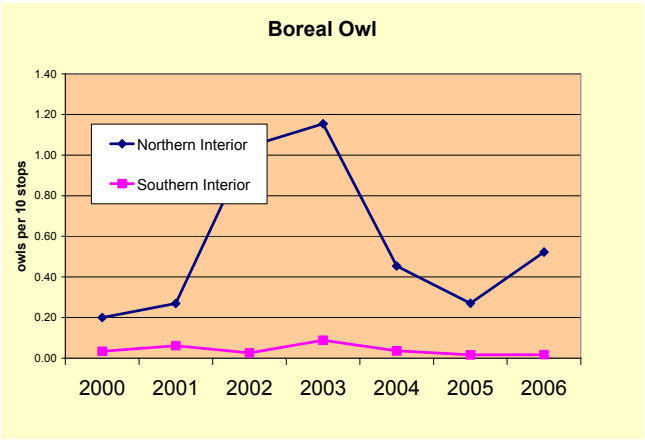


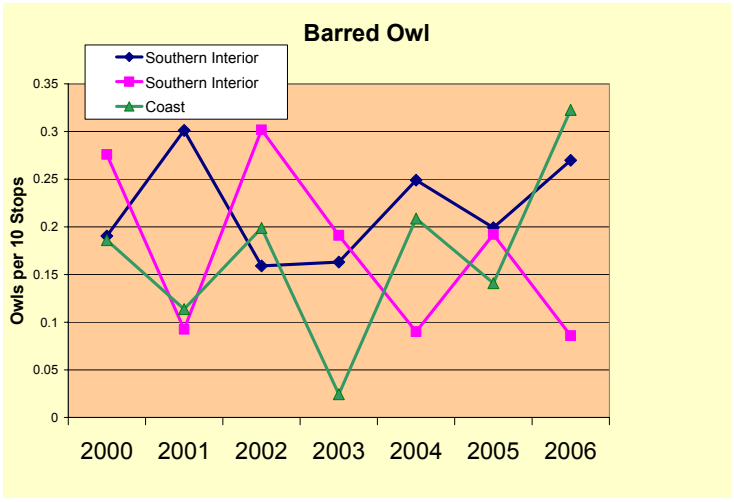
		Barn	Western Screech	Great Horned	Northern Hawk	Northern Pygmy	Barred	Great Gray	Long-eared	Boreal	N. Saw-whet	TOTAL
COAST												
29 surveys	Total Birds	1	9	2	0	2	10	0	0	0	8	32
25 routes	Birds per 10 stops	0.03	0.29	0.06	0	0.06	0.32	0	0	0	0.26	1.0
	# routes with species	1	7	2	0	2	7	0	0	0	7	18
SOUTHERN INTERIOR	Total Birds	0	5	40	0	2	5	2	4	1	54	113
37 surveys	Birds per 10 stops	0	0.09	0.69	0	0.03	0.09	0.03	0.07	0.02	0.93	1.94
37 routes	# routes with species	0	5	20	0	2	5	1	3	1	20	31
NORTHERN INTERIOR	Total Birds	0	0	37	1	0	16	1	1	31	59	146
39 surveys	Birds per 10 stops	0	0	0.62	0.02	0	0.27	0.02	0.02	0.52	0.99	2.46
34 routes	# routes with species	0	0	12	1	0	7	1	1	14	12	30
TOTAL	Total Birds	1	14	79	1	4	31	3	5	32	121	291
105 surveys	Birds per 10 stops	0.01	0.09	0.53	0.01	0.03	0.21	0.02	0.03	0.22	0.81	1.96
96 routes	# routes with species	1	12	34	1	4	19	2	4	15	39	79

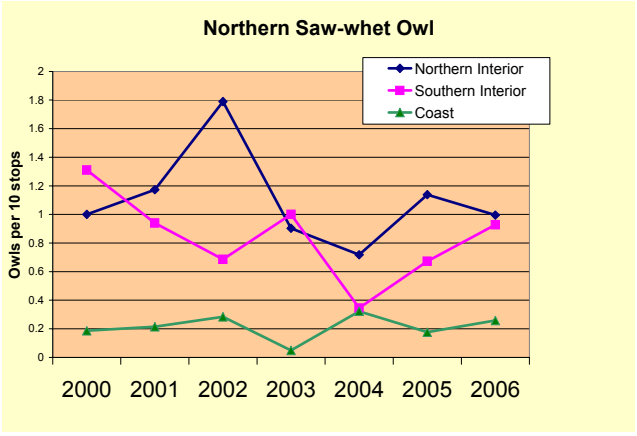
Table 1. Owls reported on the survey in 2006. Species totals are given as birds per 10 stops so that direct comparison can be made among regions and years. Coastal routes are those west of the Coast-Cascade crest; Southern Interior counts are those from the Thompson, Nicola, Okanagan, Columbia and Kootenay valleys and adjacent plateaus; Northern Interior routes include those from the Cariboo-Chilcotin, Prince George, Mackenzie and Fort Nelson areas, the Bulkley Valley, and the Yukon. The number of surveys includes some routes that were done more than once.

Western Screech-Owl roosting against tree-trunk.
Photo: Jared Hobbs









Trends in owl numbers

Here are the trends for the numbers of five common owl species reported since the survey began, presented in owls per 10 stops. Please note that the effect of playback has not been factored out of the results from the coast for the past three years.

NEWS AND NOTES

Owling in junipers

Just before the Oliver-Osoyoos Christmas Bird Count I got a phone call from Doug Brown, an owl surveyor (and excellent all-round birder) from Osoyoos. He told me of several owls he had found roosting in the birch woodlands along the oxbows of the Okanagan River just north of Osoyoos Lake. Three Great Horned Owls and one Long-eared were roosting as usual in the water birches that dominate the riparian woodland, but a Western Screech-Owl and Barn Owl were in two different Rocky Mountain junipers—a rather rare species in the bottomlands. A second Barn Owl was in a Douglas-fir. While on the Vaseux Lake Christmas count a few days later I saw a juniper as I came out of a similar stretch of riverside habitat. Remembering what Doug had told me, I looked carefully at the small tree and noticed a pattern of closely set white dots in the middle of the green branches that could only be dots on the scapular feathers of an owl. I put my binoculars to my eyes and there was a Northern Saw-whet Owl looking back at me. Four days after that I was on the Cawston Christmas Bird Count in the south Similkameen Valley. The road I was supposed to cover ended abruptly in a deep snowdrift, so I got out to walk. Seeing a couple of junipers off a few hundred metres away in a sea of sagebrush, I thought they might be a good destination. I didn't find any owls in them, but on the way there I did flush a Short-eared Owl from under a sagebrush. Driving back down the road I saw two more lone junipers down by the river. I immediately parked and began hiking through the snow to reach them. These were large junipers and I could get right inside the first one. When I stood at the trunk and looked out, there was another saw-whet looking back. So if you're out in open woodland and see a Rocky Mountain juniper—take a close look for owls!

A well travelled owl

Northern Saw-whet Owls are commonly banded in eastern and central Canada where several of the Canadian Migration Monitoring Network stations have long-term owl monitoring projects. The species' movement in that part of the country is becoming well documented. In the west, however, this is not the case. It is only in the last few years that banders have begun targeting Northern Saw-whet Owls. In 2002, Vancouver Island's Rocky Point Bird Observatory initiated a fall owl monitoring project that now bands 200 to 400 Northern Saw-whet Owls annually. The Rocky Point Project has had a handful of recoveries in Washington State, all of which were within 150 kilometres of the banding site. Elsewhere, Dan Zazelenchuk has been banding Northern Saw-whet Owls on his farm near Kyle, Saskatchewan since 2003, and he has worked as a volunteer on Last Mountain Bird Observatory's Saw-whet Owl Monitoring Project. On October 23, Dan made an interesting discovery in his owl nets – a Northern Saw-whet Owl that had been banded September 27, 2003 at Rocky Point Bird Observatory, over 1150 kilometres to the west of his current location. Rocky Point Bird Observatory's Paul Levesque could not believe it. "This is an amazing recovery. In the past three years this owl flew over open ocean to leave Vancouver Island, crossed the Rockies, and was crossing the Great Plains when Dan recaptured it. Band recoveries like this show how little we know about the movement patterns of owls*." [extracted from Bird Studies Canada's "Latest News"]*

OWL SURVEYS IN SOUTHEAST ALASKA

Biologists Michelle Kissling, Steve Lewis and Irene Morris have organized an owl survey in coastal southeastern Alaska for the last two years. They based their survey protocol on the one we use in BC and the Yukon, and have had similar challenges and successes. Because of the lack of long roads in the fjords and islands of the Alaska panhandle, some routes are only two stops long, and they encourage participants to survey their routes once a month from March through August. Like our survey, they have a mix of playback and non-playback routes and have had to deal with very low detection rates on most routes. Northern Saw-whet Owls were their commonest owl in 2006, making up 56 % of survey detections, followed by Barred Owl (22%), Western Screech (13%), Great Horned (5%) and Northern Pygmy (4%). Because of the differences in methods, it is difficult to easily compare their results to ours, but the dominance of Northern Saw-whet Owl is interesting. On the BC coast, saw-whets made up only 26% of detections this year, behind both Barred (32%) and Western Screech (29%). Like the BC survey, however, they discovered that playback results in more detections of Western Screech and Barred Owls, but almost all Northern Saw-whets and Great Horned Owls were heard first before the playback started.

A Western Screech-Owl juvenile near Cabin Creek, Mitkof Island, southeast Alaska (*photo: Dan Cushing)*

It's already 2007...

Participants will be getting their 2007 BC Nocturnal Owl Survey packets by email before the end of January. I plan to post the proper datasheets on the Bird Studies Canada website, so check there if you accidentally delete my email message! Surveyors without internet access will be getting paper forms as usual. Many thanks for your work on this survey over the years!

--Dick Cannings

BC-Yukon Nocturnal Owl Survey

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