

Pellet Post

Enriching the Port Kells habitat

By Mike Mackintosh

We may be biased, but we believe that Burrowing Owls are intelligent – every year we learn a little bit more about their cognitive powers.

Of course we would not want them to be bored either. So, at Port Kells Breeding Facility, new things are happening to stimulate the mental powers of our owls, and to help to keep them healthy and strong.

Early this spring, Director Rosemarie Tirshman began to experiment with ways to simulate natural conditions – and to stimulate their bird brains.

Over the summer she has added beds of gravel and sand to help the birds to keep their bills and talons trim. We're adding more rocks too, just like at the spots where they will be released next spring. But she has also introduced several “toys” to the enclosure.

Some have been more successful than others. She has found that the pine cones and mounds of grasses are regularly moved about by the birds. The sprayer, which is controlled by timer, is greatly enjoyed by the juveniles on hot summer days.

We also get to watch much of the action as Monika Tolksdorf has installed a camera that catches the goings-on when we leave the enclosure. (Catch it at www.burrowingowlbc.org).

Burrowing Owls may be pretty clever, but they also like to be a bit mysterious!



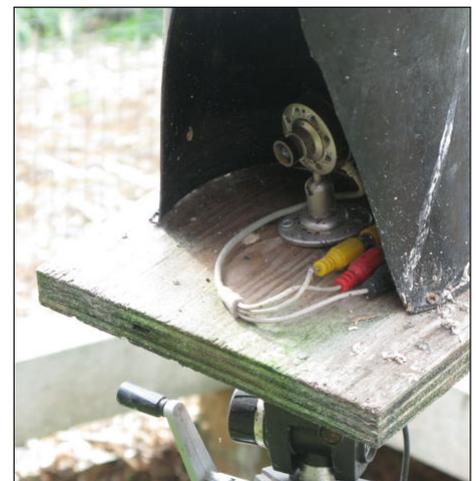
Director Rosemarie Tirshman has installed a mister on a timer which has been a feature popular with the owls in the summer heat. — Mike Mackintosh photo



Newly installed tunnel in the Port Kells flyway. — Mike Mackintosh photo



A pinecone can be stimulating plaything for a burrowing owl. — Mike Mackintosh photo



Candid camera catches all the action. — Mike Mackintosh photo

Spring release 2010

At the end of April, numerous volunteers witnessed the release of two pairs of owls at one site at the Guichon Ranch. A day earlier, the majority of the 99 captive bred owls had been released into the Nicola Valley and earlier in the month four pairs were released in the Okanagan at the Elkin Ranch.

This release day was momentous because not only were old burrows removed and some new ones installed, but people learned about all aspects of Burrowing Owl biology.

Several guest speakers educated the volunteers about the various plants in the owls' grassland habitat. Other activities included bird watching at the Ducks Unlimited pond nearby, dissecting pellets and meeting the education owl Pilot.

In addition John Surgenor from the Ministry of the Environment gave a talk about the success of this Society and how the plight of Burrowing Owls throughout Canada is gaining awareness and support.

For the 99 birds released, 32 soft-release cages were set up in the Nicola Valley, and 4 cages in the Okanagan. Thanks go out to the volunteers, notably to Cliff Lemire, for their help with pre-release field work.

The soft-release cages continue to improve the survivability of the released owls and increase the percentage which hatch offspring. In total 24 nests in the Nicola Valley and the Okanagan produced 168 juveniles.

This was a particularly difficult year for the owls as high rainfall led to an increase in grass. While tall grass was great for the local rodent population it made it difficult for the owls to hunt the rodents. Ideally owls need areas of short grass to facilitate visibility for successful hunting.

This year there were several owls fell prey to their number one predator, the Red-tailed Hawk. Despite these difficulties, we had a very productive year and had the highest number of returning owls ever, 23 returned to the Nicola Valley!



Tian Everest's daughter with Pilot the education owl at the spring release. — Dawn Brodie photo



Volunteers put up a soft-release cage for the spring release. — Dawn Brodie photo



Volunteers heard local rancher Judy Guichon speak about the partnership between ranchers and Burrowing Owls. — Dawn Brodie photo



New pastures: First releases in the Okanagan

Burrowing owl at Elkind Ranch — Bob Mackay photo

Expansion of the Burrowing Owl recovery program to the southern interior of B.C. led the Society to identify the Elkind Ranch area as suitable habitat to release captive-bred Burrowing Owls.

Last fall a crew installed 24 artificial burrows on the ranch to prepare for the first release of captive-bred owls in the area.

On April 8, four pairs of owls were released into soft-release cages and monitored by the volunteer field crew: Donna Heard, Charles and Judy Gurr, Bob McKay and Andrea Gielens.

The group took on the responsibility of surveying and monitoring the owls for the duration of the season under the guidance of our field director Dawn Brodie. One pair successfully fledged six juveniles. Now we must wait to see who migrates back in the spring.

The society is in the midst of plans to expand its efforts in the Okanagan as this was an area that was historically Burrowing Owl habitat.

Thanks to all of the volunteer field crew for their great work in monitoring the owls this year, and thank you to Jim Wyse for pulling together this excellent team!



Lauren Meads with field volunteer Bob McKay at the Elkind site catch juvenile owls to band. — Jim Wyse photo



New Okanagan field volunteer, Donna Heard with Pilot the education owl.

— Jim Wyse photo

Love at first sighting: The juveniles on Elkind Ranch

By Donna Heard OLIVER B.C.

One morning in mid-June I went out to the Elkind site to feed the owls. As I approached the burrow I could see the female up on a rock but she soon disappeared.

Imagine my surprise as I arrived at the burrow to see two juvenile Burrowing Owls looking out at me. So cute!

They seemed unwary and stared at me for about fifteen seconds while I breathlessly stared back. They then turned and ran back into the burrow. I'm sure I was the first human they had seen and they were the first juvenile Burrowing Owls I had ever seen. As an avid birder, it was a memorable moment for me.

Location, location, location

It has been another successful year for the Burrowing Owl re-introduction efforts in British Columbia.

This year we saw a record number of owls return to the Nicola Valley Region of B.C., with approximately 23 owls being identified. Some were wild-born owls from previous years and others were captive released.

About 11 of these returning males were caught and fitted with geolocators as part of the Prairie Initiative. Troy Wellicome showed us how to catch and fit the owls with the geolocators.

We are hoping that some of these owls will return next year, which will allow us to assess their migration routes.

The geolocators weigh approximately three grams which is less than five percent of a Burrowing Owl's weight. These devices record the light and dark cycles every minute. When owls return next year, the geolocators can be removed and their data retrieved. The data will be entered into a program which can locate the migration route within a 50 kilometre radius.

In 2009, Troy Wellicome last year fitted numerous owls in Alberta and Saskatchewan with geolocators.

We hope that this step along with Troy's research and similar research carried out in the US, will allow us to better understand the migration routes of the Burrowing Owl.

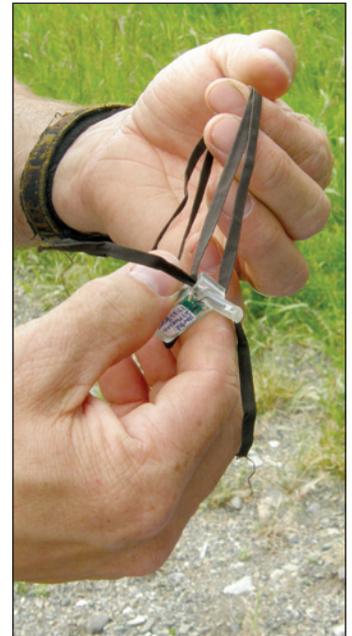
This knowledge can help conservation efforts by preserving habitat on their migration path, thus contributing to more returning owls to BC and Canada.



Troy Wellicome setting up a trap to catch a specific male owl to fit with a geocator. — Lauren Meads photos



Geocator attached to the back of a returning male owl.



Teflon straps attach Geocator to the owl like a backpack.

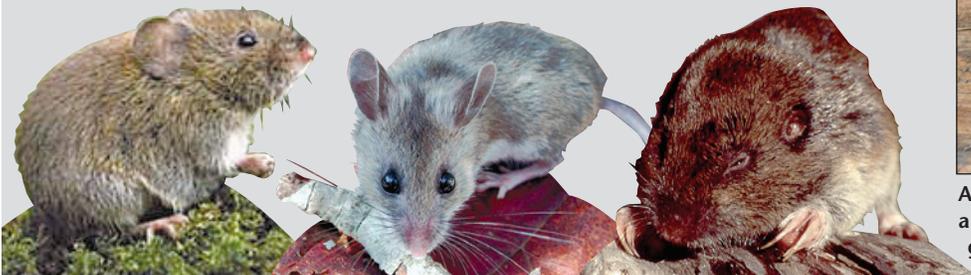
What do Burrowing Owls dine on?

Burrowing Owls are opportunistic foragers and you may find any of the following food items in a pellet or food cache.

- Grasshoppers
- Snakes
- Bluebirds
- Salamanders
- Crickets
- Bats
- Robins
- Variety of small birds
- Beetles
- Vesper sparrows
- Frogs
- Meadow voles
- Deer mice
- Pocket gophers



A male owl's food cache, collected to entice a female before mating, consists of pocket gophers and deer mice. — by Paula Pick photo



Salt blocks used to lick tall grass problem

Salt blocks provided to ranchers by the society are put out in fields to encourage grazing pressure in that area. Heavier grazing means shorter grasses which directly improves the foraging ability of the owls.

Ranchers appreciate the extra salt blocks for their livestock. Without the continued support of the ranchers this program would not be successful.



Salt blocks delivered to local ranchers. — Lauren Meads photo

Owls spotted!



Adult Burrowing Owl in Flight. — Lauren Meads photo

There were a few notable sightings of owls this past year:

1 During the prep work before the spring release a female owl was found that had no bands on her! Lauren put some bands on her and this year along with a returning male had a successful clutch.

2 Field researchers in Lillooet, BC contacted the Society after they spotted a Burrowing Owl on June 4, 2010. They scoped the bird and were able to provide us with its band numbers.

They also took several excellent photos and gave us the GPS location of the bird. The male bird stayed for a week or so and was not seen



again until spotted by field staff in July at its natal site (born in 2009) in the Nicola Valley! This owl was caught and fitted with a geolocator.

3 In October of 2009 Rick Gerhardt caught a BC owl at the Warm Springs Reserve in Oregon (North East

Oregon).

Rick is a respected biologist who has a consulting company called Sage Science. The owl was an offspring that was born in the Nicola Valley in 2009. This owl was probably on its migration route when captured.

After it was identified in Oregon and released, Rick said that it was gone after a week. Most exciting was that this same owl returned this year to its natal site!! It had a successful clutch with a released female. He was also caught and fitted with a geolocator. Hopefully we will be able to get the data from the geolocator next year and see where he went after Oregon.

Who dines on Burrowing Owls?

The owls' biggest threats in the Thompson/Nicola area are avian predators namely...

The Red-tailed Hawk



The Northern Harrier



The Short-eared Owl



New sexing techniques

This year the Society worked closely with the Wildlife Genetics International (Nelson, BC) to develop a less stressful way to assess the sex of the owls.

Usually blood is collected through a vein in the wing or clipping of the talon. Both ways can be stressful for the owl and sometimes a hematoma can develop which can be very painful.

Though we have become more efficient and cause less stress in the extracting of the blood from the wing vein, we wanted a procedure that could be done by people other than animal health technicians.

It was discussed that several other types of animals have been correctly sexed by means of a buccal or cheek swab. This method involves taking a swab and rubbing it on the inside of the owl's mouth, collecting cells on the swab. The sample is dried and sent to the lab for analysis.

This procedure was done at Port Kells in conjunction with the

blood collection by Dawn Brody and Alysha Elsby (both animal health technologists).

The other method is taking a few feathers from the breast area of the owl that contains tissue. This has been a common procedure for many types of birds.

Paul Williams and the staff at the BC Wildlife Park took blood and also extracted feathers for analysis.

Both techniques proved to be as accurate as extracting the blood. Therefore next year we will move towards feather extraction and buccal swabs as the preferred methods.

They are as accurate and require less handling time and therefore less stress on the owls. Also these techniques can be applied to younger owls, perhaps when the juveniles are still in the nest.

However blood extraction will still be used to obtain larger volumes needed for a complete blood chemistry analysis.



Aimee Mitchell (left) and Alysha Elsby ready to take a blood and buccal sample at the Port Kells captive facility. — Dawn Brodie photo



Mike Mackintosh (right) brings owls to be processed while Chris Currie records data.

— Lauren Meads photo



Buccal Swabs dry before being shipped off for analysis.

— Dawn Brodie photo

Building burrows: An annual tradition

A team of Kamloops volunteers composed of Cathy Hall-Patch, Margaret Patten, Mary Anne Unruh, and Paula Pick were accompanied by directors Paul Williams and Dawn Brodie and field assistants Lauren Meads and John Edwards gathered at the end of August.

This "burrow brigade" constructed 50 artificial burrows in preparation for the coming year. The team set up an assembly line and all was completed in a few hours.

These burrows will be used in many ways like replacing the old and damaged burrows, adding to existing burrows and to be used at new sites.

Thanks again to a great team!



Volunteers building artificial burrows. — Dawn Brodie photo



Mike Mackintosh directed Beaker in photo shoots in aid of the National Park campaign in Kelowna.

BOCSBC is reaching out

The society continues to expand its outreach program and this year several presentations featuring Pilot, the newest education owl, were given to local groups.

The education owls have been extremely important in putting a face to the conservation efforts. Some of the places that we have presented are:



Dawn Brodie escorted Pilot the education owl to the French immersion class in Merritt BC.

- Local elementary schools
- French immersion school
- Sparks/Brownie group
- Thompson Rivers University – Animal Health Technician class
- BC Naturalist Federation
- Knutsford Fall Fair – Near Kamloops
- Habitat Stewardship Program – PR event in Kelowna
- BC Grasslands Council – Open house day
- An article was written for the Summer edition of the BC Grasslands Council Magazine
- In Kelowna at a fundraiser in support of The South Okanagan-Similkameen Grasslands National Park Reserve
- Elaine Humphrey our Education Director is also busy assembling a detailed education kit that can be distributed to schools and organizations.

Burrow masters: The Oregon Burrowing Owl project

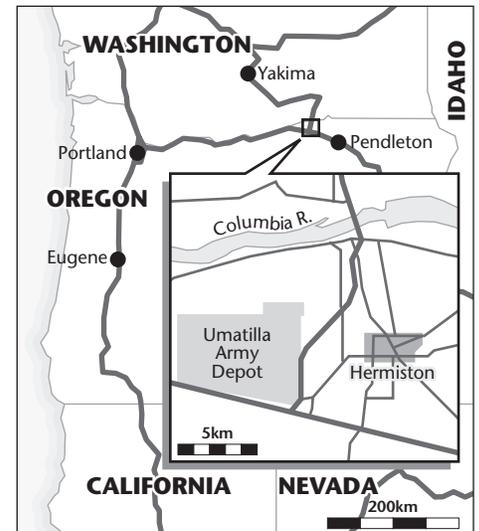
Two field researchers, Dawn Brodie and Lauren Meads were able to travel to Hermiston, Oregon, to help install artificial burrows on a military site of 20,000 acres. This was in conjunction with the Global Owl Project, US Fish and Wildlife and the Umatilla Chemical Depot (Army).

They have had great success this year with about 30 wild pairs of owls producing about 70 offspring. Over the 4 days, 60 new burrows were installed using a backhoe for a grand total of 115 artificial burrows and 10 natural burrows. It was a great trip and we were able to communicate with each

other about our successes, failures and future strategies. The program, headed by David Johnson and Don Gillis, is now on the lookout for green/black banded owls. This site has the potential to attract B.C. owls on their migration south so we will be staying in contact with our southern partners.



The crew helping to install burrows in Oregon, made up of USFW employees, biologists and the BC field staff. — Dawn Brodie photo



— Nick Murphy map

VOLUNTEER PROFILE:

Mary Anne Unruh



Mary Anne beside the completed artificial burrows built this fall. — Dawn Brodie photo

Mary Anne has been a part of the Society since its very humble beginnings. Initially living in Vancouver she moved to Kamloops and has stayed on as an active and concerned member of the Society.

Q Mary Anne why did you become a volunteer for the Burrowing Owl Society?

A In the beginning I was very happy as a docent and animal rehab person with the Vancouver Aquarium. At that time we had the harbour seal re-hab in the Stanley Park Zoo. At the front of the exhibit Mike Mackintosh and John Gray had the Burrowing Owls – this was my introduction to

them. John and Mike then twisted my arm to assist with the owls.

Q What makes the Burrowing Owl a cool animal to work with and for?

A Hmm... let me think here. They are very cute and fuzzy when about 3 weeks old & no longer look like pre-historic birds. They're pretty cute as adults and have an interesting way of using a nest (in the ground as opposed to above or in a tree). They have the coolest coo.coo...

Sometimes I think of them as "popsicle stick owls. They do give humans that "warm and fuzzy feel". On a serious note I think one

of the coolest things is how this little owl has helped bring together a couple of groups that in the past have not always gotten along (landowners and environmentalists).

Mary Anne is always seen at the spring release and fall digs. She also helps to build burrows, assists in outreach programs and is active in the future of the Society.

To our new volunteers Mary Anne is an excellent source of advice and information on what it takes to be an active member of the Burrowing Owl Conservation Society of BC.

Thanks Mary Anne for all your hard work!

Beaker meets Stockwell Day

On September 13, Mike Mackintosh, Dawn Brodie and Nick Murphy attended this important public relations event with Beaker the education owl. There they met with Stockwell Day.

The Habitat Stewardship Program had been able to give funds again to the Burrowing Owl Conservation Society of BC. Without their continued support the Society would not be able to operate and expand their work on Burrowing Owl conservation.



Stockwell Day, shares a photo-op with Beaker and Mike Mackintosh. — Nick Murphy photo

Meet the BOCSSBC board of directors

Here is the list of Directors and their roles. If you want to volunteer more please contact the appropriate director.

- **Mike Mackintosh**, Vancouver, B.C., Chair of the Board and Public Relations and Media Director
groundowl@yahoo.ca
- **Jim Wyse**, Oliver, B.C., Finance and Fundraising Director, *jwyse@burrowingowlwine.ca*
- **Dawn Brodie**, Kamloops, B.C., Field Director
dawnbrodie@telus.net
- **Paul Williams**, Kamloops, B.C., Captive Director
paulwilliams@bczoo.org
- **Aimee Mitchell**, Vancouver, B.C., Science Director
athene.aimee@gmail.com
- **Elaine Humphrey**, Victoria, B.C., Education Director
ech@uvic.ca
- **Rosemarie Tirshman**, Vancouver, B.C., Volunteer and Membership Director
bocsbc@gmail.com
- **Dave Low**, Kamloops, B.C., Director of Lac Du Bois
helga-dave@shaw.ca

Thanks to our sponsors

- Husbandry Stewardship Program for Species at Risk
- The Burrowing Owl Wineries – Jim Wyse
- Wildlife Preservation Canada – Elaine Williams
- Canadian Wildlife Service of Alberta
- Special acknowledgment to Toni Hess, for her continued commitment and support of the program for over 6 years
- Mike and Maureen Lipkewich
- Private Donations

