



## OKANAGAN SIMILKAMEEN STEWARDSHIP NEWS

SUMMER 2020

### Celebrating Over 100 Stewards!

#### An exciting milestone

Over 100 Wildlife Habitat Steward partners are conserving 5500 acres of important natural areas in the Okanagan and Similkameen valleys. While some of our Wildlife Habitat Stewards have home properties, most are operating working properties such as farms, bed and breakfasts, and even golf courses.

What all of our Stewards have in common is that they are caretakers of important wildlife habitats. If you or someone you know is interested in becoming a Wildlife Habitat Steward too, you should contact us at [info@osstewardship.ca](mailto:info@osstewardship.ca) or visit our website at [www.osstewardship.ca/stewards](http://www.osstewardship.ca/stewards).

#### In this issue:

Celebrating 100 Stewards!

Farming With Wildlife

Snake Smart

Badger Myths Busted

Amazing Grasslands

Desert Amphibians

Stewardship in Action

Stewardship at a Distance



Anette and Jorg Engel run Maple Leaf Spirits Inc. on the Naramata bench. Most of their property is rugged terrain and open pine grasslands and is left entirely natural. As well as being an important movement corridor for wildlife overall, the property is also home to elk, several snake species, and woodpeckers.



Meet Brett Thiessen of Mt. Boucherie Estate Winery. Brett recently signed on as our 100th Wildlife Habitat Steward! Mount Boucherie has a new vineyard in Cawston and we are looking forward to working with them to restore a large area of riparian forest along the Similkameen River. Last fall they dug in some new ponds which spadefoots are already using.



# Farming With Wildlife

## New *Living in Nature* Series guide goes digital

Farming and stewardship go hand in hand. For generations, farmers and ranchers have been coexisting with wildlife. Our new Farming with Wildlife guide contains management practices which can benefit farms and wildlife at the same time. Some of the tips and articles in the guide include:

- Avoiding rodenticides and rat poisons, which often also kill helpful rodent predators like owls, bobcats, and coyotes.
- Fencing off creek and wetland areas to limit livestock damage and allow natural riparian habitat to persist, while still allowing limited water access points
- Rethinking water use by switching from overhead sprinklers or dividing fields with different water needs to save water and improve crop yields.
- Installing songbird nest boxes and raptor perches to help with insect and rodent control.



Okanagan Similkameen Stewardship Society

**Living in Nature**  
*Series*

### FARMING WITH WILDLIFE

Farming and stewardship naturally go hand-in-hand - both place high value on having clean water and clean air at our homes and in our communities. Farmers work alongside nature to protect these valuable resources from one generation to the next.

Farming and conservation can be a mutually beneficial partnership. Enhancing and conserving natural biodiversity can often increase productivity of farms by encouraging pollinators and other beneficial predatory insects. Agricultural properties, in turn, can provide valuable habitat for the region's wildlife while taking advantage of the benefits that stewardship of wild areas provides.

This guide gives a few simple tips to incorporating wildlife-friendly choices into your working property.

#### IN THIS GUIDE

- Benefits of wildlife on farms
- Attracting beneficial wildlife
- Managing wildlife on farms
- Best management practices
- Additional Resources



**This digital guide is available at [www.osstewardship.ca/agriculture](http://www.osstewardship.ca/agriculture)**  
**Print copies are available by emailing [info@osstewardship.ca](mailto:info@osstewardship.ca)**



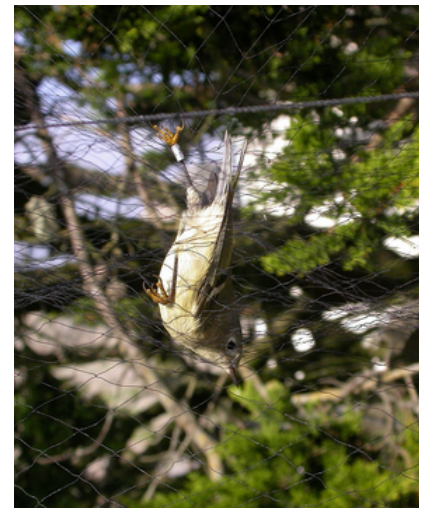
## Keep Agricultural Netting Tight

### This tool can be deadly!

Agricultural netting can be a humane way to keep birds from eating fruit crops, but if it is left loose, birds and other wildlife can get tangled and trapped. The result can be fatal.

You may know songbirds can get caught in loose agricultural netting, but did you know it can also be deadly to our reptile friends? Unless the animal is found and released, it may either slowly starve or die of heatstroke or hypothermia. In order to ensure the safety of all wildlife, agricultural netting must be kept off the ground and tightly secured around plants and trees. Netting should be checked at least twice a day to ensure that no animals are caught.

Trapped animals are stressed and feel threatened- this means they will often lash out at people trying to help in an effort to protect themselves. Keeping your netting tight and off the ground keeps snakes safe but it also keeps you safe.





# Be Snake Smart

## Get to know your local snakes

Our region is home to seven species of snakes but only one of them is venomous. Despite this, most local snake species are at risk and still continue to be threatened due to road mortality and direct persecution.

The Community Foundation of the South Okanagan-Similkameen and the Habitat Stewardship Program are supporting up to 5 workshops in the region for agricultural owners and workers. If your vineyard or farm could benefit from hands-on training or support, please contact us at [info@osstewardship.ca](mailto:info@osstewardship.ca) for more information.



*The Rubber Boa is a nocturnal snake and rarely seen as it spends most of its time under coarse woody debris. Unlike boas in the tropics, Rubber Boas rarely exceed 70cm.*

**Our Snake Smart training webinars are available on our website at [www.osstewardship.ca/snakes](http://www.osstewardship.ca/snakes)**

*The Northern Pacific Rattlesnake has a broad, triangular head, halos around their spots and a distinct rattle. These snakes are our only venomous snakes and their venom is a deadly weapon against rodents.*



## Stop! Hey! What's that sound?

**When you hear the buzzing of a rattlesnake:**

1. Stop and determine where it is located.
2. Slowly retreat from the snake. Remember, the rattle is a sign that the snake is aware of you and wishes to avoid confrontation.
3. Do not attempt to move the snake unless it is absolutely necessary.
4. If you suddenly find yourself in strike range (length of the snake), remain motionless and have someone else use a stick to distract the snake away from you. Even though they can sense heat, if you remain motionless, you will not appear threatening.

## Stewardship Tips



Brake for snakes! Be careful to avoid driving over snakes when they are crossing roads.



Avoid disturbing rock and woody debris in potential snake habitat.



Encourage others to use harmless and effective ways to cope with snake encounters, such as snake barrier fencing around yards.



Control domestic pets (cats and dogs) that will harm snakes.



Do not disturb dens if you find them.



Do not move snakes around!  
Snakes are very loyal to their den sites.



Never harass a snake.

**Snakes are protected by the Wildlife Act and it is a Federal offence to harass or kill a snake.**



# Badger Facts

## Myths Busted

The American Badger is a small carnivore that lives in open forests and grasslands. They are part of the Weasel (or "Mustelid") family and are close cousins to otters, wolverines, and minks. Badgers are critically endangered in BC – the number of badgers in the whole province is estimated at just 300 or so individuals, with only about 30 of those found in the entire Okanagan-Similkameen. Habitat loss and road mortality are the main risks for badgers in BC.



*Farm pests like mice and ground squirrels make up most of a badger's diet*



*Badger burrows (above) are often oval, like a football, with a huge amount of dirt splayed out in a wide fan at the bottom*

Badgers were wrongfully persecuted through much of the 20th century. Many farmers believed that cattle could step into their large, deep burrows and break a leg, so badgers seen in the area would be hunted or trapped. In an ironic twist, it turns out that cattle are more likely to break legs in burrows made by ground squirrels, which are a badger's main prey!! A single badger will eat 2 ground squirrels a day and a female with kits will eat more. For this reason, it's essential to avoid using rat poisons. If a badger (or raptor) eats a poisoned rodent or ground squirrel, they will be poisoned as well.

Although badgers have a reputation for being vicious and aggressive, badgers only attack if they feel threatened, and are regularly seen cooperating with coyotes to hunt ground squirrels together. This effective hunting strategy combines each animals' best strength; badgers are fast diggers (but slow runners), and coyotes are fast runners (but slow diggers). When they hunt together, the squirrels have a higher chance of being caught because they are not safe above or below ground. The two partners won't share the resulting catch, but the partnership is so effective that they will end up catching more prey overall.

Also seen on  
#funfactfriday!



## Badgers and Burrowing Owls

The decline in badgers is known to be due to human persecution and human-caused habitat fragmentation. This decline also affected another species, so much so that they can no longer be found in BC.

Burrowing Owls were once abundant throughout the Okanagan and Thompson regions.

Because they can't dig their own burrows, the owls relied on badgers, and used abandoned badger burrows to nest and to raise their chicks. When badger numbers dropped, so did the number of empty burrows, and the owls were left with few places to raise chicks. Eventually, this lack of habitat led to their disappearance from our area.

The Burrowing Owl Conservation Society of BC is trying to bring them back with artificial burrows. If you see a Burrowing Owl in BC please report it to [bocsbc@gmail.com](mailto:bocsbc@gmail.com).





# Amazing Grasslands

## More than just grass!

The Okanagan and Similkameen are known for the beautiful shrub-grasslands that cover the rolling hills of our valleys. These ecosystems are critical in supporting hundreds of different species of plants, animals, and insects. In addition to their beauty, our grasslands also provide us with excellent recreation opportunities and important grazing lands. Despite their benefits, grasslands are often seen as 'easily develop-able' and are greatly threatened because of this.

It is important we treat our grasslands with respect to ensure we can enjoy their benefits for years to come.



Grasslands are one of the world's most endangered ecosystems.



## Grassland Superpowers



- Healthy grasslands have fewer invasive plant species and are less susceptible to severe wildfire
- Grassland plants have deep, extensive root systems which prevents soil erosion and nutrient loss, and stabilizes slopes
- Most of the pollinators we depend on in the Okanagan Similkameen need healthy grasslands and wildflowers that occur there in order to thrive.

## Down to earth

The ground in a grassland ecosystem is covered by a very delicate *cryptogamic crust*. This biological soil crust is composed of mosses and lichens, bacteria, and fungi, and it is vital for erosion protection, as well as carbon and nitrogen fixation.



## Stewardship Tips

Don't bust the crust! Always **stay on trails when enjoying the outdoors**. Constant traffic by hikers, and especially faster moving bike and ATV tires rapidly destroys this crust, which can take decades to fully heal.

Try to make sure you **control the spread of invasive species**. These alien plants aggressively push native species out of the way and often grow more abundantly, building up fuel loads and increasing the risk of wildfire. Before leaving an outdoor area, check your boots, packs, pets, and pants for seeds, putting anything you find in the garbage so as to not spread it to a new area.

If you own livestock, be sure to **follow best management practices (BMPs) for livestock grazing** on grasslands. Although some grassland systems do well with heavy grazing and lots of livestock movement, our type of grassland does not and should be grazed more gently.





# Desert Amphibians

## No water? No problem.

Many amphibians (e.g. frogs, newts, salamanders) live either in water or in areas with high humidity and moisture. Their skin has to stay damp at all times because they partly breathe through their skin, and cannot absorb oxygen if their skin dries out. Despite this, there are two different species of amphibian in the Okanagan and Similkameen that can survive in our dry, desert-like grasslands. Blotched Tiger Salamanders and Great Basin Spadefoots have adaptations that help them to survive where others cannot.



Top Photo: Temporary ponds that form after spring rains but dry up in midsummer are important habitats in our dry interior



Spadefoots use the fingernail-like spades on their hind feet to burrow deep into loose, sandy soils

## I Will Survive

One thing that both Tiger Salamanders and Spadefoots have in common is the ability to burrow and hibernate for part of the summer. It is much cooler and more humid underground which helps them avoid the hot weather.

**Blotched Tiger Salamanders** (middle) are fairly large, dark coloured salamanders with big yellow-green blotches all over. Adults can be 25 cm (10 in) long! To avoid the heat and dry weather, these salamanders live and hunt almost entirely underground. Because of this, they are very rarely seen, except during rainy nights and summer storms when they emerge to move around and do some extra hunting.

**Great Basin Spadefoots** (bottom) are squat, grey-brown toad-like amphibians with a large spade on each of their hind feet (photos top right). These spades allow them to dig themselves up to 1 m (3 ft) underground to avoid hot, dry weather. When breeding, spadefoots are able to use temporary ponds that form from snowmelt because it takes just 6 weeks for their eggs to hatch and develop into adults!

## Stewardship Tips



Keep it messy! Leaving natural vegetation, fallen logs and other messy things provides better habitat.



Have an in-ground pool? Consider an amphibian escape ramp like a Frog Log or Skamper-Ramp.



Don't move wildlife far! Some amphibians may be infected with chytrid fungus. Moving amphibians moves this deadly disease. If you find a wayward amphibian in your basement, gently move them outside to somewhere nearby, safe from dangers such as domestic cats or dogs.



Amphibians need clean water, too!

Continue on to the next page to learn how you can help keep our drinking water clean!



# Do your part to keep our water clean!

- 💧 If you live next to water, leaving or establishing a wide strip of native plants (a vegetation buffer) along the water's edge helps to keep the water clean by filtering out pollutants in runoff, using extra nutrients before they reach the water, and anchoring soils to prevent erosion.
- 💧 Always clean, drain, and dry any boats or other watercraft (including belly boats, kayaks and inflatable rafts), in between use to prevent the spread of invasive species.
- 💧 Don't let it loose! From fish to turtles to aquarium plants, non-native species can have disastrous effects on our waterways. When unwanted pets, such as goldfish, are released they are voracious predators of indigenous amphibians and also dig at the bottom and reduce water quality. Releasing live fish into our water systems is illegal and carries a maximum penalty of \$100,000 for first-time offenders.
- 💧 Avoid using pesticides, herbicides and chemical fertilizers as much as possible, and never use them when rain is in the forecast.



## Stewardship in Action

### Basking platforms a success

Large logs and pieces of floating debris are important in ponds for Painted Turtles and waterfowl to use, but are often absent or have been removed for aesthetic reasons. They can also become waterlogged and sink.

As reptiles, Painted Turtles need to bask in the sun to keep their body temperature up for daily activities. Waterfowl often rest, preen, and sleep out of the water so it is important to have safe places in the pond where they can do so.

Over the past three years, OSS has embarked on a project to install basking platforms in a number of places. This involves a complex process: identifying appropriate ponds, working with landowners, acquiring the necessary permits, and building and installing the platforms.

Basking platforms were constructed of PVC floats to keep them high and dry in changing water levels. They are installed away from the shoreline to provide protection from terrestrial predators such as coyotes.

Basking platforms were installed in six different ponds from Vernon to Osoyoos and are already being used by turtles and waterfowl in all locations.





# Get Involved with Stewardship

## ...at a distance

While we were unable to hire a full summer field crew and have also reduced the scale of our community volunteer initiatives in light of physical distancing guidelines, much of stewardship is still possible.

We have shifted our focus to one-on-one activities, outdoors, in order to ensure the safety of local residents and our staff. If you are interested in stewardship opportunities on your property and in becoming a Wildlife Habitat Steward, now is a great time to work towards your vision.

Even if you don't have natural areas on your property, there is still a lot you can do to practice stewardship while still keeping your distance. See the infographic on this page for ways to get involved.

### For more information

#### please contact OSS at:

E: [info@osstewardship.ca](mailto:info@osstewardship.ca)

P: 250.770.1467

W: [www.osstewardship.ca](http://www.osstewardship.ca)

  [@osstewardship](https://www.instagram.com/osstewardship)

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### Partners in stewardship and conservation:



SOUTH OKANAGAN  
CONSERVATION FUND



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## BECOME A STEWARD

If you are interested in becoming a Wildlife Habitat Steward, now is a great time. Physical distancing is possible at on-site visits.

## VOLUNTEER IN THE FIELD

While large volunteer gatherings are not possible, we will shift to a series of smaller green-ups and clean-ups. Sign up to receive volunteer event invitations at: [www.osstewardship.ca/volunteer](http://www.osstewardship.ca/volunteer)



## VOLUNTEER FOR OUR BOARD

Directors volunteer their time for monthly (video) meetings and special projects in order to guide OSS. More information at [www.osstewardship.ca/board](http://www.osstewardship.ca/board)

## BE A CITIZEN SCIENTIST

Follow us on Facebook and Instagram (@osstewardship) to learn more about citizen science opportunities!



## BECOME A MEMBER OR DONATE

Support OSS initiatives with an annual membership (\$10/year) or donation. Membership purchase and donations can be made on our website via CanadaHelps at [www.osstewardship.ca/membership](http://www.osstewardship.ca/membership)