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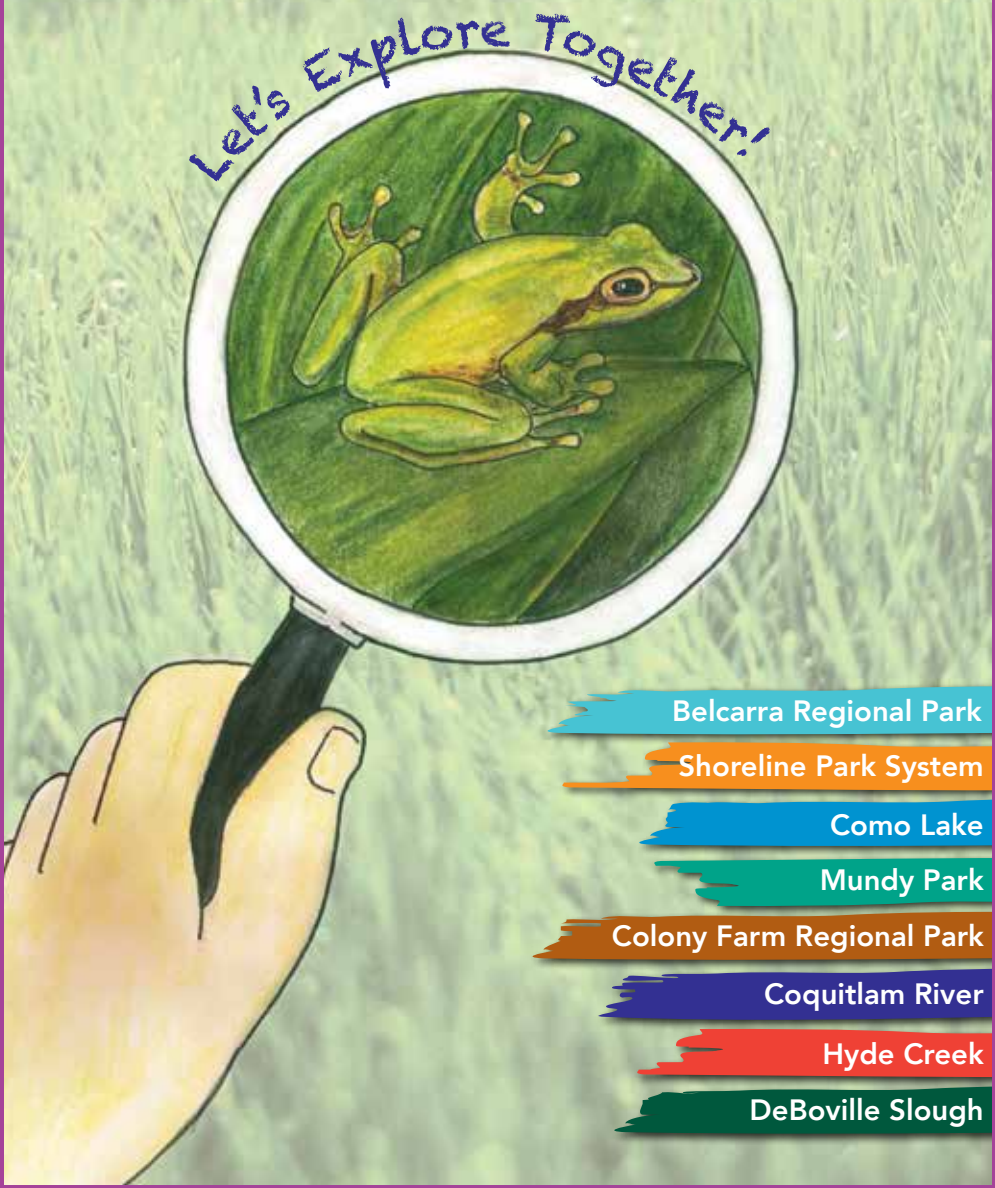
Burke Mountain Naturalists

# DISCOVER NATURE
## IN THE TRI-CITIES




Belcarra Regional Park
Shoreline Park System
Como Lake
Mundy Park
Colony Farm Regional Park
Coquitlam River
Hyde Creek
DeBoville Slough

*This guide is dedicated in memory of Danny Grass, a young member of the Burke Mountain Naturalists. Danny put his heart and soul into the things he loved — and one of those things was nature.*

*We hope this guide inspires your passion for nature too.*

Exploring the outdoors is a fun way to learn about our natural environment and where we live. The Burke Mountain Naturalists created this booklet to introduce children and families to the habitat, flora, and fauna of eight popular nature sites in the Tri-Cities. Each site in the booklet includes a description about the habitat, plants and wildlife that can be commonly found there, along with coloured illustrations and a map of where to explore.

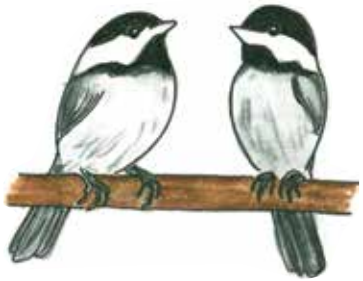
Each site offers something different to explore. At **Belcarra Park** you can learn about the variety of life found where the ocean meets the land. Along the **Shoreline Trail** you can observe many waterfowl that make the salt-water inlet their home. In **Mundy Park** you can walk through mature forest with two small lakes. At **Como Lake** you will see many creatures that are attracted by the small fish in the lake and the wetlands. Along the **Coquitlam River** and **Hyde Creek** waterways, you will find riparian habitat and salmon spawning in the fall – Hyde Creek also has a fish hatchery. At **Colony Farm** and **DeBoville Slough** you will find diked areas each with very different habitats – Colony Farm has tall grass meadows and ponds, and DeBoville Slough is a freshwater tidal wetland.

The overview map on the adjacent page shows the location of these sites in the Tri-Cities area.

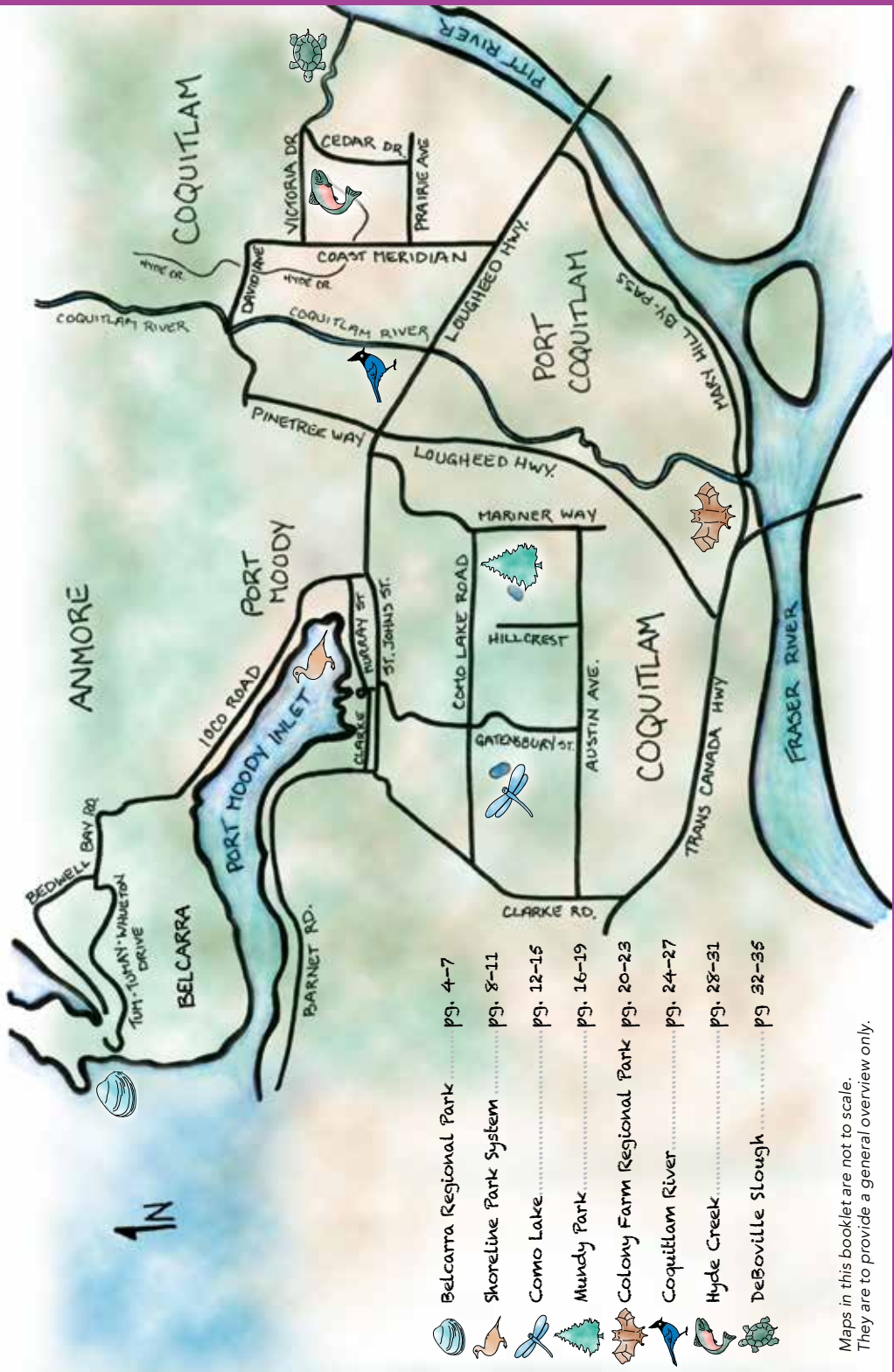
If you are just starting to learn about nature, there may be some words you are not familiar with such as those in **bold** in the booklet. You can find what these words mean by referring to the Glossary on page 36.

You can improve your chances of finding the many creatures that live at the sites by using the How to Explore tips on page 37. Use the Nature Checklist on page 39 to keep track of the different animals and plants that you find throughout the year.

If you would like to learn more about plants and animals, you will want to use a good nature reference guide. Visit the Burke Mountain Naturalists website for links to helpful resources and to download a digital copy of this guide.



Enjoy being an outdoor explorer. Be curious and have fun. There is lots to discover in nature!



cormorant

# Belcarra Regional Park

At Belcarra Regional Park, you can explore a rocky beach rich with **intertidal** life.

Try to go when the tides are low. Remember to wear suitable shoes for walking in the wet **mudflats** and rocky areas.

The Tsleil-Waututh First Nation used Belcarra Beach for several thousand years as a place to gather food. There is evidence of an ancient shell **midden** on the shoreline. Today, people fish for crab or small fish off the pier.

## HABITAT, FLORA, AND FAUNA

At first glance, the beach may look empty and lifeless. But, look closely and be patient: you can discover fascinating communities at each level of the beach. Each animal is specially adapted for the tidal zone in which it lives.

periwinkle snails

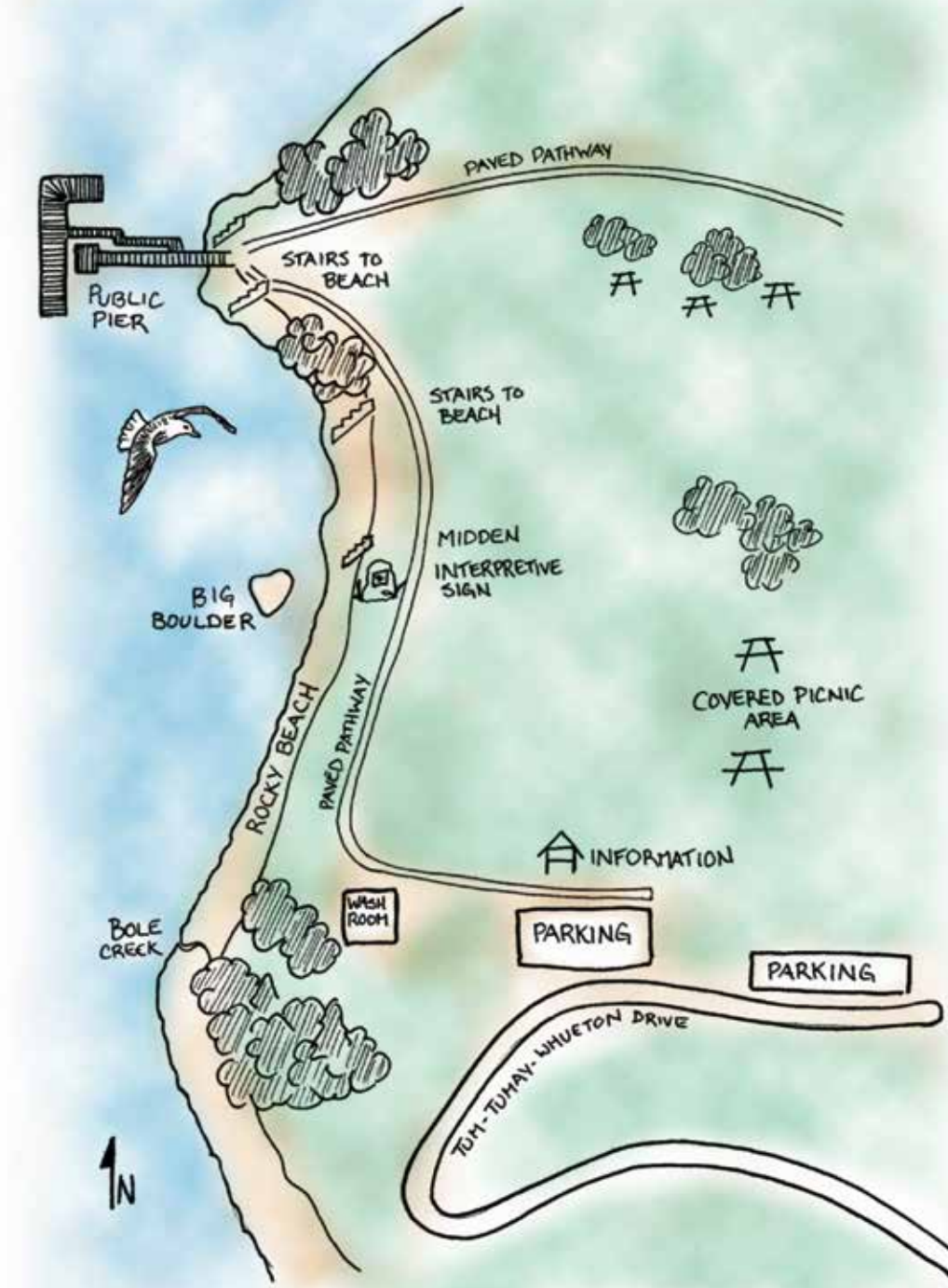
Some creatures can survive many hours out of water. They do this by closing their shells tightly or burrowing in the sand. Some animals need more moisture, so they stay in tide pools or under rocks, logs or bits of seaweed. Others must remain in the water to survive.

hermit crab

Everything on the beach is interconnected. A cast-off snail shell becomes a hermit crab's home. A stranded sea star is a gull's breakfast. Sea stars keep the populations of mussels in balance by feeding on them. The seaweed and wood on the beach provide nutrients and shelter for sea life. Many animals live under the rocks and use them as nurseries for their eggs.

**Did you know?**

Some gulls prey on exposed sea stars during the low tide. After grasping a couple of arms, they very slowly swallow the sea star whole!



# Let's Explore... Belcarra Regional Park!


kelp crab

## SUBTIDAL ZONE
*(under water)*

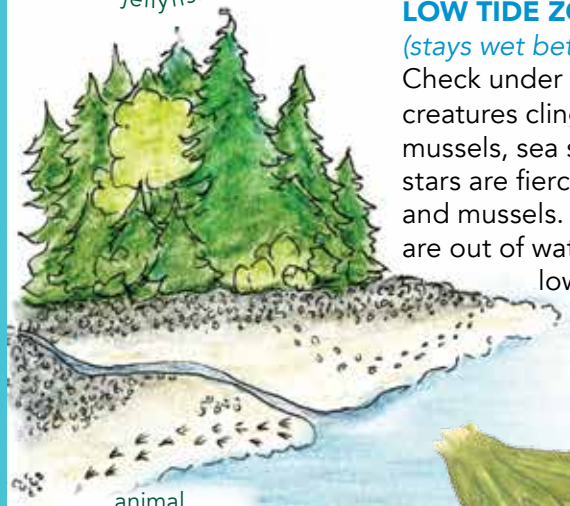
Look over the side of the pier or between the planks. You may see kelp crabs clinging to the kelp and fish such as shiner perch swimming under the pier. Perhaps you will see a large red rock crab or a sunflower star on the ocean floor. Moon jellyfish sometimes swim near the surface.


moon jellyfish


red rock crab

## LOW TIDE ZONE
*(stays wet between tides)*

Check under the pier to find a wealth of sea creatures clinging to the **pilings**: barnacles, mussels, sea stars and sea anemones. Sea stars are fierce **predators** of the barnacles and mussels. Sea anemones close when they are out of water. Which animals are highest or lowest on the piling? Is the order always the same?


animal footprints


rockweed


sea lettuce


plumose anemone

## TIDE POOLS
*(animals can withstand the change in temperature)*

Sit quietly and watch the tide pool creatures feeding. You may see tide pool sculpins, shore crabs, barnacles, mussels, limpets, colourful sea anemones and sea stars, depending on the depth of the tide pool.

## MID-TIDE ZONE
*(animals have less exposure)*

In front of the stairs, find the large boulder covered with **crustaceans** and **molluscs**: barnacles, mussels, snails and limpets. Turn over a smaller rock and watch shore crabs scuttle away. Be sure to turn the rocks back after looking. The holes in the sand are made by clams burrowing below the surface.


shore crab

## HIGH TIDE ZONE
*(animals must endure long periods of dryness)*

Look under seaweed or driftwood for small flea-like crustaceans called beach hoppers. They clean up debris on the beach and do not bite.


beach hopper

## SPRAY OR SPLASH ZONE
*(above the high tide line)*

Find the freshwater stream that runs from the forest to the ocean. Look for animal footprints.


glaucous-winged gull


blue mussels


barnacles

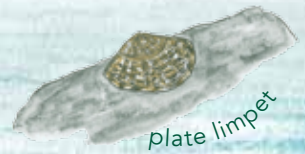


plate limpet

hooded merganser

# Shoreline Park System

Shoreline Park System has many types of habitat. There are **coniferous** and **deciduous** forests, grassy areas, wetlands, and mixed forest. There are also sandy beaches, **mudflats** at low tide, and salmon streams. The different types of **habitat** merge with one another. This attracts a mix of wildlife species.

Once, this area contained several sawmills. The one at the "old mill site" is fun to explore at low tide.

## HABITAT, FLORA, AND FAUNA

Shoreline Park System is an interesting place to explore throughout the year. In the late fall and winter, several species of ducks fly to the waters of Burrard Inlet. They come from all over BC when inland lakes and rivers freeze. From the pier at Rocky Point Park you can see several species of diving ducks during the winter months.

common merganser

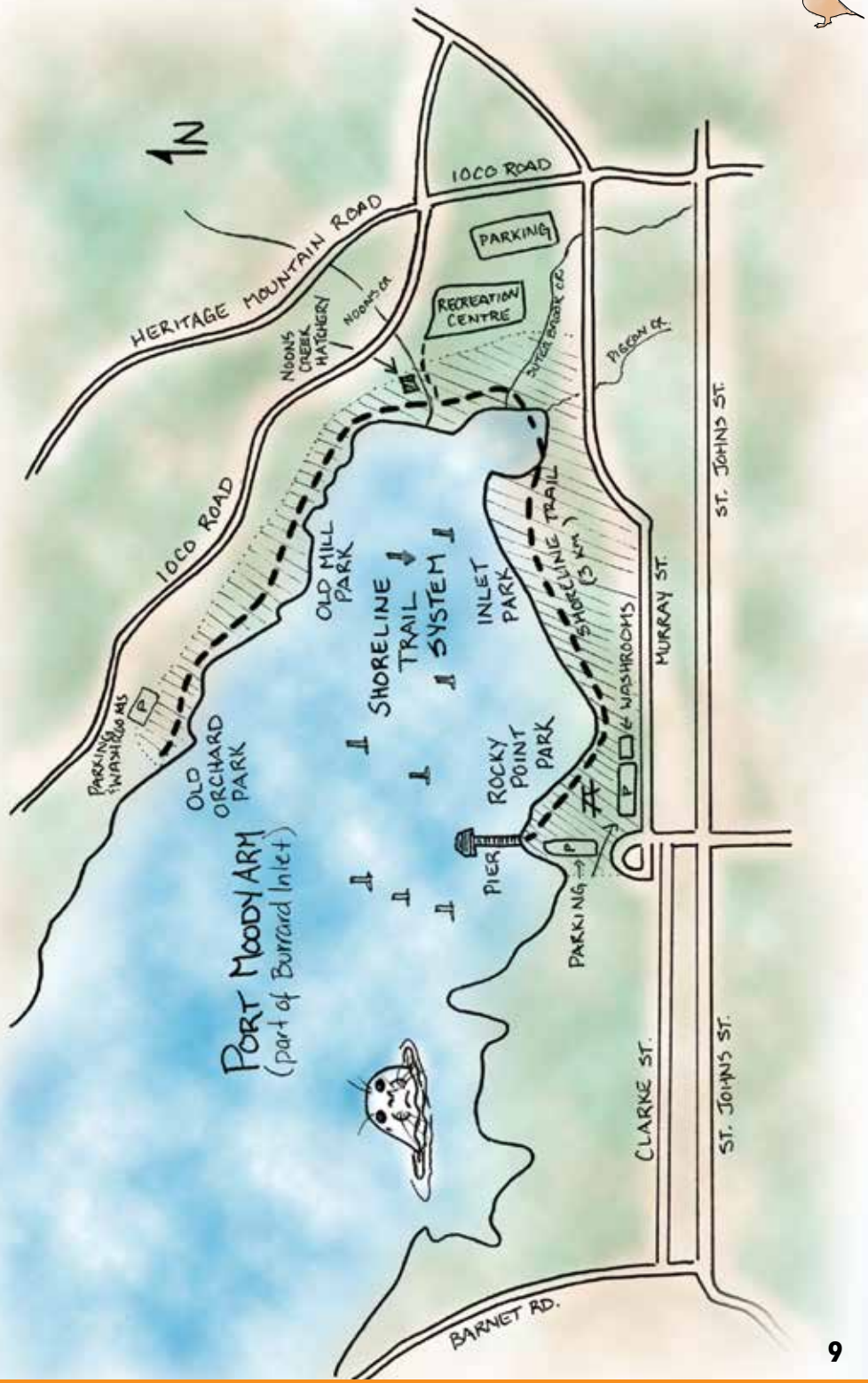
harbour seal

Watch for the occasional head of a harbour seal to bob up in the water.

At the head of the inlet where the water is shallower, look for **dabbling ducks**. In fall, salmon return to **spawn** in Noons Creek and Suterbrook Creek.

**Did you know?**

About a dozen species of gulls may be observed throughout Metro Vancouver but none are called "seagulls".



# Let's Explore... Shoreline Park System!

Barrow's goldeneye

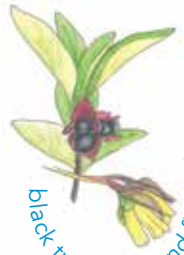
How many different kinds of ducks can you see from the pier at Rocky Point? Watch how they disappear beneath the water for a few moments as they search for food. Buffleheads are the smallest of the diving ducks and have a big white patch on their heads. They dive in search of shellfish. You may also see other ducks diving, including Barrow's goldeneye and scaup. Mergansers dive for fish. They have longer bills with rough edges which help them to grasp slippery fish. Look for black-and-white hooded mergansers with their tall heads, and common mergansers, the males of which are mostly white but have a greenish head similar to mallards.

Each winter, male ducks develop colourful plumage to attract females. Can you see the differences? Use a guidebook to help you.

pair of northern pintails

thimbleberry and flower

During the winter, ducks spend most of their time searching for food or **preening** their feathers. Preening involves spreading oil from a gland near their tail onto their outer feathers to keep them waterproofed. Without this oil, they would become wet and chilled every time they dive. Can you imagine what it would be like to spend all winter diving into cold water? Waterproofed feathers are essential to their survival.



black twinberry and flowers

purple martin

When you are at the end of the pier, look out at the **pilings** in the water. Can you find the flat platform where ospreys nest in summer? The small wooden nest boxes are used by purple martins. These members of the swallow family fly all the way from South America every spring to nest here.

sword fern

Follow the Shoreline trail through the **coniferous** forest to the boardwalks at the head of Burrard Inlet. This shady forest with sword ferns growing beneath attracts chickadees, towhees and woodpeckers. Can you spot a Sitka spruce with its shaggy bark near the trail as you approach the head of the inlet?

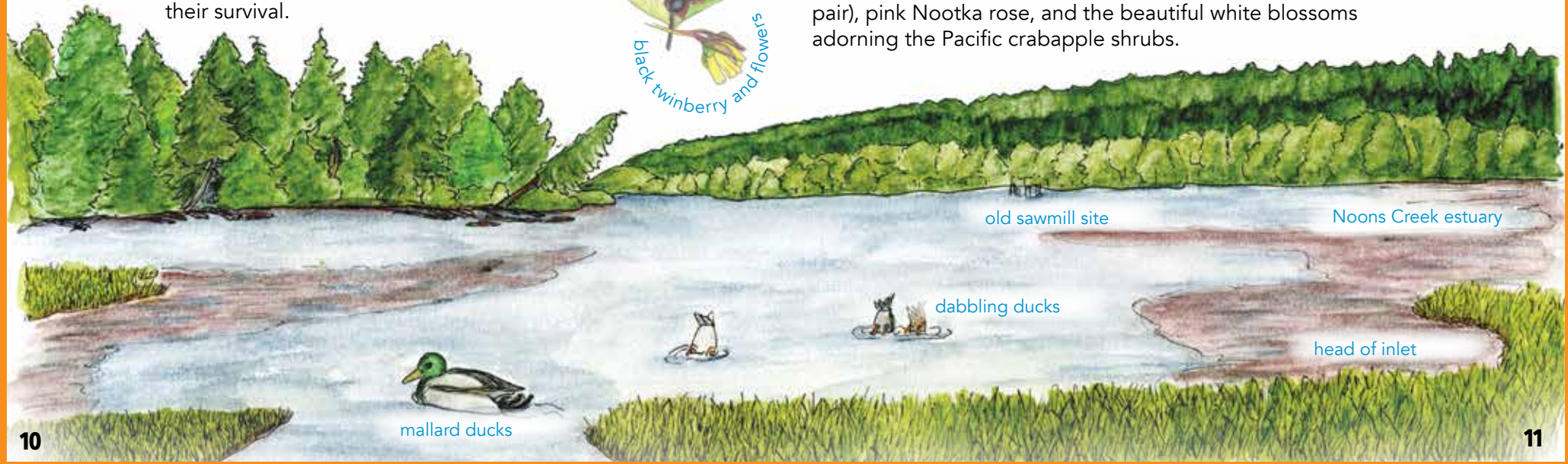
Sitka spruce

dunlin

At the head of the inlet the shallow water becomes a **mudflat** at low tide. On an incoming tide, watch for shorebirds such as dunlin feeding at the edge of the water. These wading birds have large feet that allow them to walk on the mudflats. When the tide is in, many **dabbling ducks** will be present. You can recognize them by their bums up and heads down positon in the water as they nibble on **aquatic** vegetation. Often they will be resting together. Examples are pintails, mallards and the smaller green-winged teal.

green-winged teal

In May, look for yellow twinberry flowers (always in a pair), pink Nootka rose, and the beautiful white blossoms adorning the Pacific crabapple shrubs.




blue darner dragonfly

Como Lake provides a refuge in the city for migrating birds in spring and fall. Up to 70 species have been recorded. Throughout the park, trees provide nesting places, food and shelter for wildlife.

Como Lake was originally fed by springs. It was used as a water reservoir for the Fraser Mills Lumber company in 1909. In cold winters, people ice-skated there. The lake is the source of Como Creek. This creek flows into the Fraser River and supports a small population of salmon.

The lake is stocked with trout twice a year and people can fish from the docks.

# Como Lake

## HABITAT, FLORA, AND FAUNA

The low shrubs, salmonberries, cattails and rushes around the lake provide good food and **habitat** for birds and small mammals.


stickleback

The **wetland** at the north end was created in 1998. It filters water running off the streets through ponds of cattails and water lilies. This makes water cleaner for fish. Herons and kingfishers hunt crayfish and sticklebacks in the shallow water.

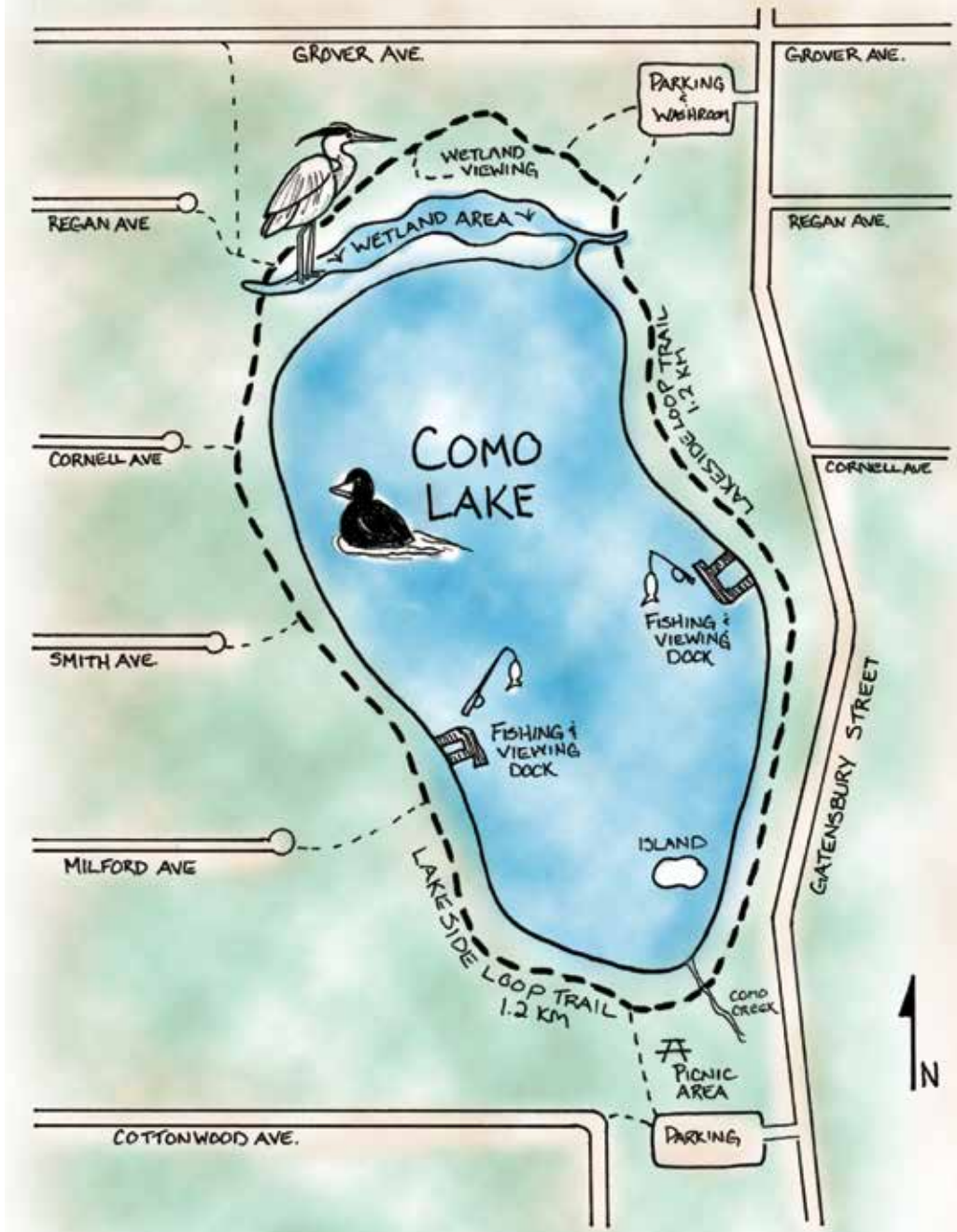
A group of young alder trees creates nesting sites for songbirds. **Leaf litter** on the ground supports small **invertebrates** like slugs and wood bugs. Trout, carp, bullheads and sticklebacks provide food for ospreys, merganser ducks and cormorants. The island and open water are safe areas for birds such as grebes, geese and ducks.


red alder

Geese feed on grasses and weeds near the lake. Overhead, swallows swoop for insects in summer.

**Did you know?**

Ospreys have sharp spikes under their feet for grasping fish. When carrying a fish, they turn the fish's head to the front, which makes flying easier.



# Let's Explore... Como Lake!

In the spring, look for fluffy mallard ducklings and Canada goose goslings. Geese are good parents but may chase you if you get too close to their babies. Goose families often merge into one large group for greater safety.

In summer, the adult geese **moult** their flight feathers and cannot fly for almost a month: their feathers and droppings cover the paths.

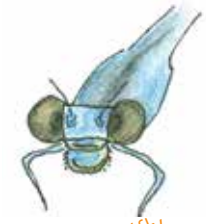
osprey

A large osprey (fish hawk) often hovers and dives for fish, feet first, making a huge splash. You may see an osprey's catch in its talons as the bird carries the fish back to a nest or perch.

Listen for the tap-tap of woodpeckers and look for the holes they make in trees. Red-winged blackbirds build a nest of woven grasses in the cattail marsh. Can you hear their calls as they defend their nesting territories?

Bats, the night patrol for bug catching, come out at dusk. They eat flying insects. They can eat as much as their own body weight in one night! Bats' shadows show up against the water as they dip to drink.

little brown bat

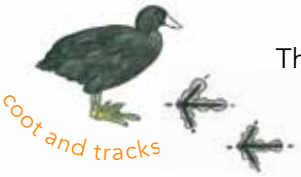


damselfly

Large dragonflies patrol and fight to protect their own territories. They eat many insects, including flying ants. Listen for the raspy sound their wings make. Smaller, bright-coloured damselflies dart about.

Coyotes and raccoons also come out at dusk. Bird and animal tracks are an interesting find: look in soft muddy spots at the trail edges or in snow.

raccoon



coot and tracks

The black birds with white bills are coots. Can you see their feet? They have three wide toes for walking easily on mud or lily pads.

Once the leaves have fallen from the trees, you can see the unique shapes of branches. Unlike other **coniferous** trees, the larch drops its needles in fall. Can you find a group of them at the south end of the park?

larch branch and cone

great blue heron in cattail marsh

great blue heron tracks

Canada goose with goslings

bufflehead

wigeon

pileated woodpecker

# Mundy Park

Much of Mundy Park is an urban forest. The original forest was logged in the early 1900s. Some of the huge remaining stumps can still be found.

Sixteen kilometres of trails wind through several types of **habitat**: forest, wetlands and lakes. Wildlife is more frequently viewed near the lakes. Lost Lake is an easy walk from the east parking lot.

Access to Mundy Lake is closest from the west parking lot. In this guide, we will explore Mundy Lake using the Lakeside Loop Trail.

## HABITAT, FLORA, AND FAUNA

The forest around Mundy Lake provides a rich **habitat** for wildlife. Some of the common **coniferous** trees include western redcedar, western hemlock and Douglas-fir. Common **deciduous** trees include vine maple, bigleaf maple and red alder.

western hemlock

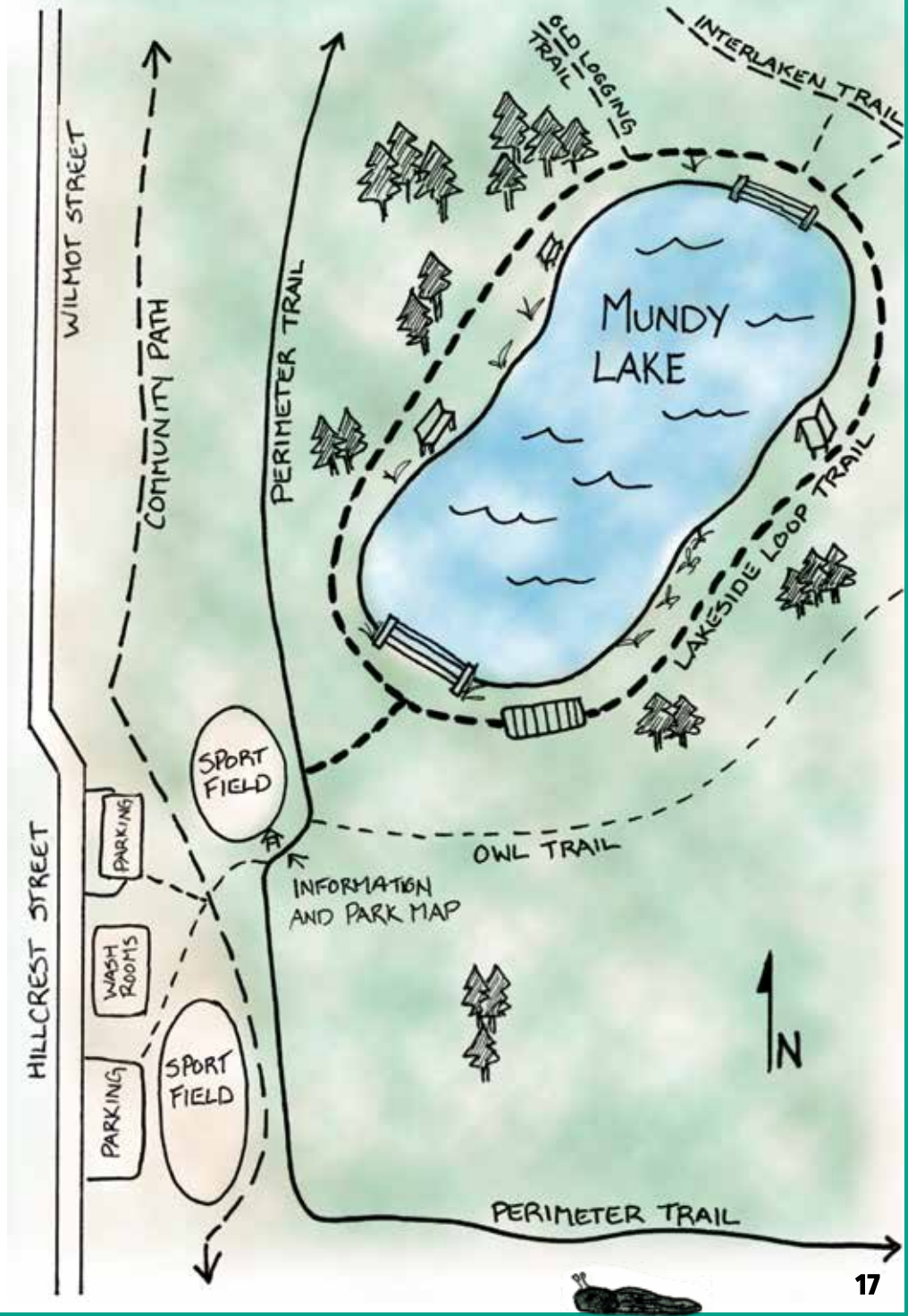
Douglas-fir

Trees are important at each stage of their life cycle. They provide food through their seeds, fruit or leaves to a variety of birds and mammals. They offer shelter in their branches, in tree cavities, and under their roots. Decaying trees provide nutrients for the soil. A dead tree full of insects such as termites, beetles or carpenter ants becomes a source of food for woodpeckers and other animals.

The lake is a home for fish, frogs, turtles and insect larvae. Birds and mammals come to the lake to find food and water.

**Did you know?**

In 1909, a few eastern grey squirrels were released into Stanley Park. These non-native squirrels from eastern North America have since multiplied to become the most commonly seen urban squirrel.



# Let's Explore... Mundy Lake!

salamander

If you creep slowly up to the shore you may get an eyeful of frogs, salamanders and dragonflies up close. Move too fast, though, and they'll make a quick getaway! The largest frogs are the non-native bullfrogs which prey on some of our native species, such as the Pacific chorus frog.

On one side of the lake, the forest floor is spongy. The lake is slowly being covered by decomposing **aquatic** plants, fallen debris and trees. At some point, the lake will be completely filled in through the process of **succession**. Look for a **nurse log**. It may have moss, huckleberry bushes or even tiny western hemlock trees growing out of it. Stay on the trail in the bog areas so you don't sink into the mud or destroy delicate **habitat**.

The pathway is lined with ferns, shrubs, and trees. Many of these plants were used by First Nations peoples. How many can you find?

red huckleberry

skunk cabbage

deer fern

Labrador tea

salal

sword fern

## THE FOREST ZONES

The forest has several different zones where you can look for wildlife, including the forest floor, understory and canopy.

### • The Canopy

In the summer, you may hear a rising series of high whistled notes from a Swainson's thrush. Barred owls sometimes perch on a large branch overhanging a clearing in the forest, such as a pathway, lake or meadow.

Swainson's thrush

### • The Understory

Small groups of chickadees, kinglets and bushtits often flock together in winter. Look for them flitting quickly from branch to branch. The Douglas squirrel may sound its alarm, chattering at you if you come too close. The Pacific wren may serenade you in spring with its beautiful song. The pileated woodpecker makes large rectangular-shaped cavities in old dead trees.

chestnut-backed chickadee

Pacific wren

bushtit

### • The Forest Floor

Slugs help recycle rotting vegetation or animal matter into soil. Can you find the non-native black slugs and native banana slugs? Look for northern flickers poking in the ground for ants. The spotted towhee performs its two-feet-together dance while foraging, digging for food and making its scratchy call.

spotted towhee

Douglas squirrel

black slug

banana slug

nurse log


red-tailed hawk

# COLONY FARM REGIONAL PARK

Colony Farm Regional Park was once a real farm.

A century ago, the BC government managed Colony Farm to grow food for people in hospitals. Patients from Riverview Hospital helped out. They milked cows, grew vegetables and cut hay using teams of horses.

In 1983, the farm was closed. Since 1996, the land has been a regional park. It is now a haven for wildlife.

## HABITAT, FLORA, AND FAUNA

Animals are attracted to Colony Farm Park because it provides a safe place to raise their young. There is an abundant supply of food such as berries, insects and fish. The **habitat** includes tall grass meadows and ponds bordered by shrubs and trees.


lazuli bunting

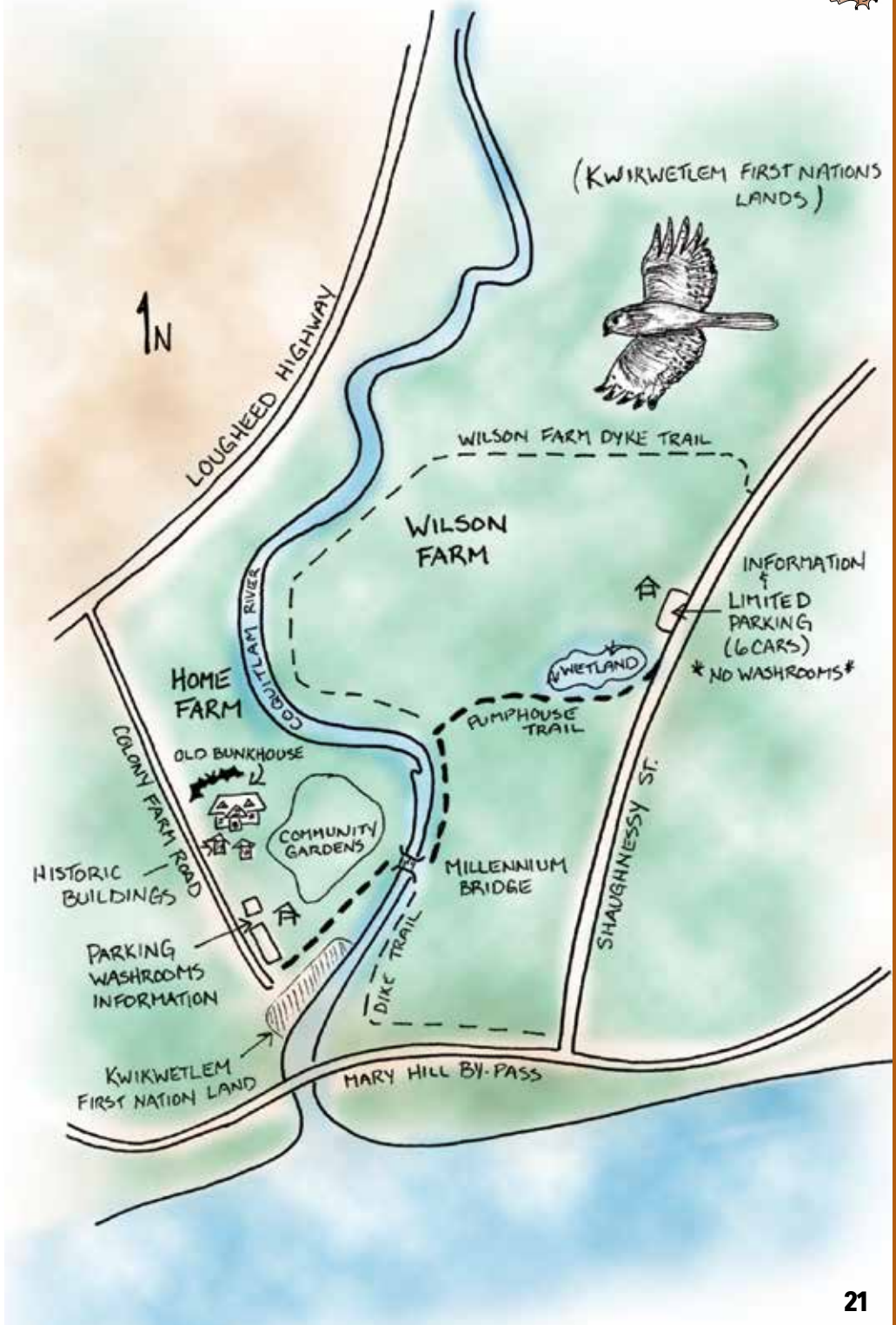
Some birds, like the pied-billed grebe, build their nest on the surface of the water. Red-winged blackbirds make nests nearby in the cattails. Northern harriers build their nests in the grass.


pied-billed grebe


red elderberry

**Did you know?**

Over 200 species of birds have been observed at Colony Farm Park throughout the year. This is approximately 40% of the bird species found in B.C.



# Let's Explore... Colony Farm Regional Park!

## NESTING TECHNIQUES

Cup, cavity or **camouflage**? Some species of birds build nests shaped like a cup. They use mud, grasses, twigs and even spider webs to construct their nests. In the spring, watch for birds carrying nesting material to their nests. Imagine using only your mouth and feet to build a nest – that's what birds do! How many trips does it take them to build a nest?

great blue heron

Not all birds construct cup-shaped nests in trees and shrubs. Some conceal their eggs on the ground hidden within tall grasses. Some birds drill holes in trees to make a nest. They may also use an existing tree cavity or a man-made nest box.

barn swallow

Look for nest boxes around the **wetland**. These boxes are used by swallows. They fly from Central America every spring to nest at Colony Farm. In early spring, you might see great blue herons perching on the boxes.

song sparrow

Other birds, like killdeer, lay their eggs on open ground in places where there are many pebbles. Their spotted eggs are hard to see because they blend in with the gravel. If a **predator** comes too close to the nest, the parent will pretend to have a broken wing to distract it and lead it away from the nest.

killdeer

The parents usually take turns keeping their eggs warm until they hatch. Once baby birds hatch, they are very hungry and require constant feeding, usually by both parents. Insects are nutritious food for many baby birds. The small berries of the red elderberry usually ripen just in time to feed hungry nestlings. Look for **raptors** flying over the fields in search of mice or voles to feed their young.

Townsend's vole

northern harrier hawk

Typically, baby birds develop their flight feathers and fly in about a month. Juvenile birds commonly stay for another month or so with their families to gain strength for long flights south for the winter. Some birds such as the common yellowthroat and other warblers migrate long distances. Species such as American robins, song sparrows and spotted towhees remain year-round.

common yellowthroat

bats emerging

Every summer, female bats use the attic in the old bunkhouse at Colony Farm to raise their babies. They need a very warm place to do this and the attic is just the right temperature. Can you spot openings in the roof where the bats fly out at dusk? Bats are unusual mammals because they can fly! Instead of wings, they use a wing-like **membrane** that stretches between their front and back legs. They catch and eat many mosquitoes and other flying insects every night.

red-winged blackbird

northern harrier hawk

old field habitat

nesting pied-billed grebe

wetland


golden-crowned kinglet

# COQUITLAM RIVER

The Coquitlam River is the third largest river in the Tri-Cities area. It runs from the mountains in the north to the Fraser River in the south.

In the past the Kwikwetlem First Nation people caught salmon here. In the 1950s the river was mined for gravel.

The Coquitlam River is dammed at Coquitlam Lake. It provides some electricity and is a major source of our drinking water. The dikes along the river were built to prevent flooding.

## HABITAT, FLORA, AND FAUNA

In this walk you'll find urban and **second growth** parkland. The **riparian** habitat beside the Coquitlam River has mostly cottonwood trees. There are also western redcedar, western hemlock, bigleaf maple and Douglas-fir trees. Shrubs consist of Indian plum, salmonberry, alder and vine maples. Ferns and mosses grow close to the ground. Non-native **invasive** plant species such as ivy, Japanese knotweed and blackberry are common.


Indian plum

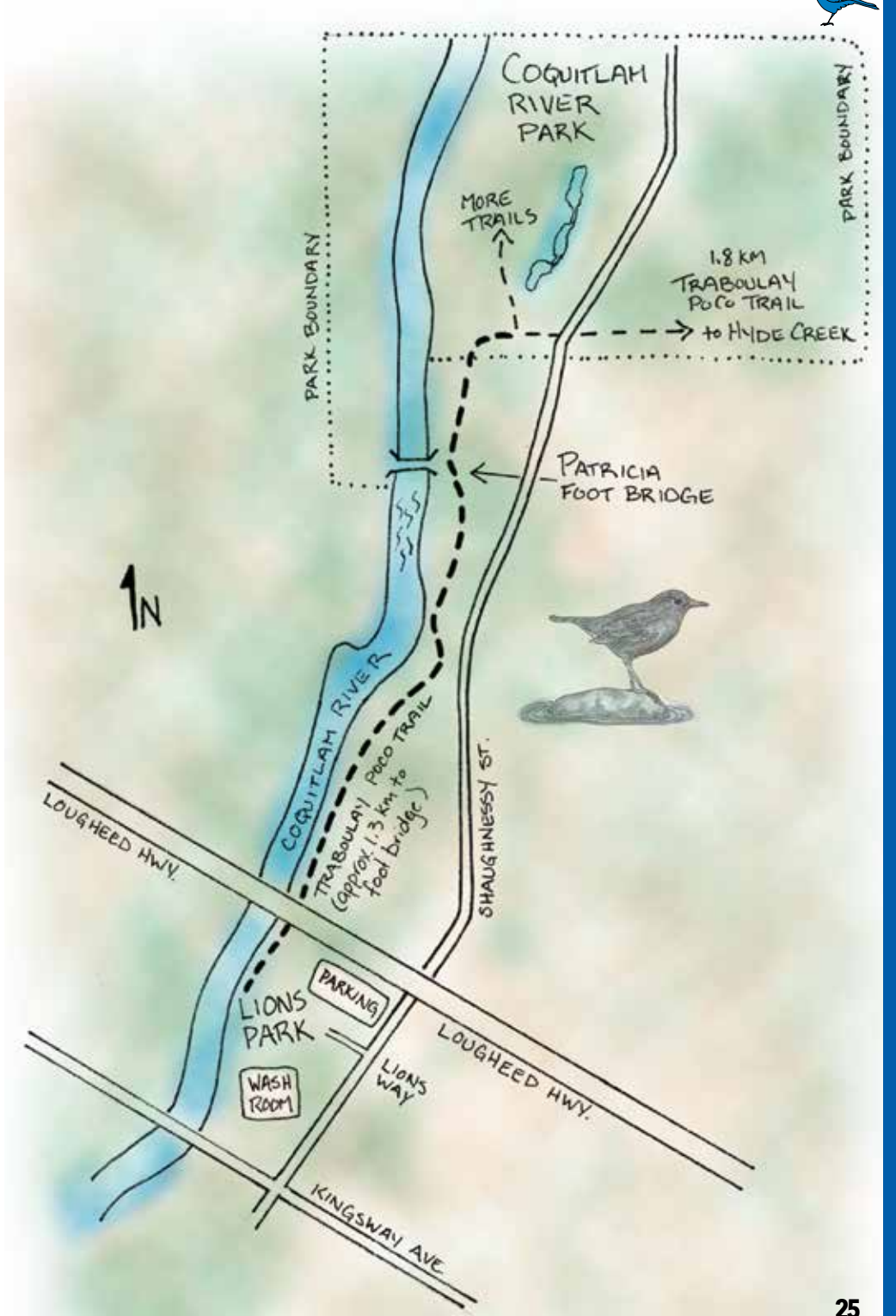
On the water you might see common mergansers or mallards. In the fall salmon migrate and **spawn** in the river. Chum are the most common but there are also coho, chinook, steelhead, and pink salmon.

Small birds such as black-capped chickadees and kinglets **forage** in the shrubs and trees. At ground level you can see spotted towhees, dark-eyed juncos and American robins.


American robin

**Did you know?**

The American dipper can dip, dive, and fly underwater. It can even walk along a stream bottom in its hunt for insects.



# Let's Explore... Coquitlam River!

Follow the trail north from Lions Park under the Lougheed Highway.

Pink salmon were almost extinct on the Coquitlam River before the late 1990s. Now, there is no gravel being removed from the river and water flow from Coquitlam Lake has been increased. Pink salmon can survive again and now **spawn** here in the fall.


Steller's jay

North of Lougheed Highway black cottonwoods, alder and Indian plum line the trail. Black cottonwood is North America's tallest **deciduous** tree. In late spring it produces many seeds. They are covered with fluffy white hairs and float through the air.


false lily-of-the-valley

riparian forest

The first flowers you see in spring are the white, clustered, hanging flowers of the Indian plum. Its small purple fruit provides food for birds and small mammals during fall and winter. In winter, listen for kinglets and chickadees as they **forage**. The golden-crowned kinglet makes a high *"see see see"* call. It is a small, olive-grey bird with a yellow, black-bordered crown.


bleeding heart

bank erosion


common merganser male


female

Beyond the Dog Off-Leash Park look for an area of bank erosion. Here you can see the ground consists of rocks and the exposed roots of trees. Farther on, a trail leads to a small beach. Look for mergansers swimming through the rapids.


American dipper


spotted towhee

As you near the Patricia walking bridge, the river gets rocky. If you're lucky you'll catch a glimpse of the American dipper. This slate-grey songbird can be seen on the rocks bobbing up and down. It has a double eyelid and scales that block water from entering its nostrils. This lets it swim and walk on the bottom of fast-moving streams while it searches for **aquatic** insects.


dark-eyed junco

Beyond the Patricia foot bridge you enter Coquitlam River Park. Here you'll find **coniferous** trees including western hemlock and Douglas-fir. The river here is wilder with more rapids. In the oxbow side-channel look for beaver-chewed trees and an old beaver lodge. You might even see the beavers. The oxbow side-channel was developed to improve salmon spawning and rearing **habitat**.


beaver


pink salmon

barred owl

# Hyde Creek

Hyde Creek and the forest around it are wonderful places. You can learn about the history of Pacific salmon and their habitat. Salmon spend years in the Pacific Ocean. They return to their stream of birth to spawn. If you visit the hatchery and the Hyde Creek Salmon Festival in November, you can see the fish in action.

At the hatchery you will learn how salmon habitat has been restored and improved. Then you can walk along the stream and see how these things help the salmon to survive and spawn.

## HABITAT, FLORA, AND FAUNA

Western redcedar

Hyde Creek flows through a forest of maple, cottonwood, red cedar and alder trees. It provides **habitat** for spawning salmon and other wildlife. In fall when salmon return home, the trees put on a fine show of colour. In spring, pink flowers of salmonberry attract hummingbirds and bumblebees. Birds enjoy its red or yellow raspberry-like fruits. Seeds in the birds' droppings take root and grow new salmonberry bushes.

salmonberry

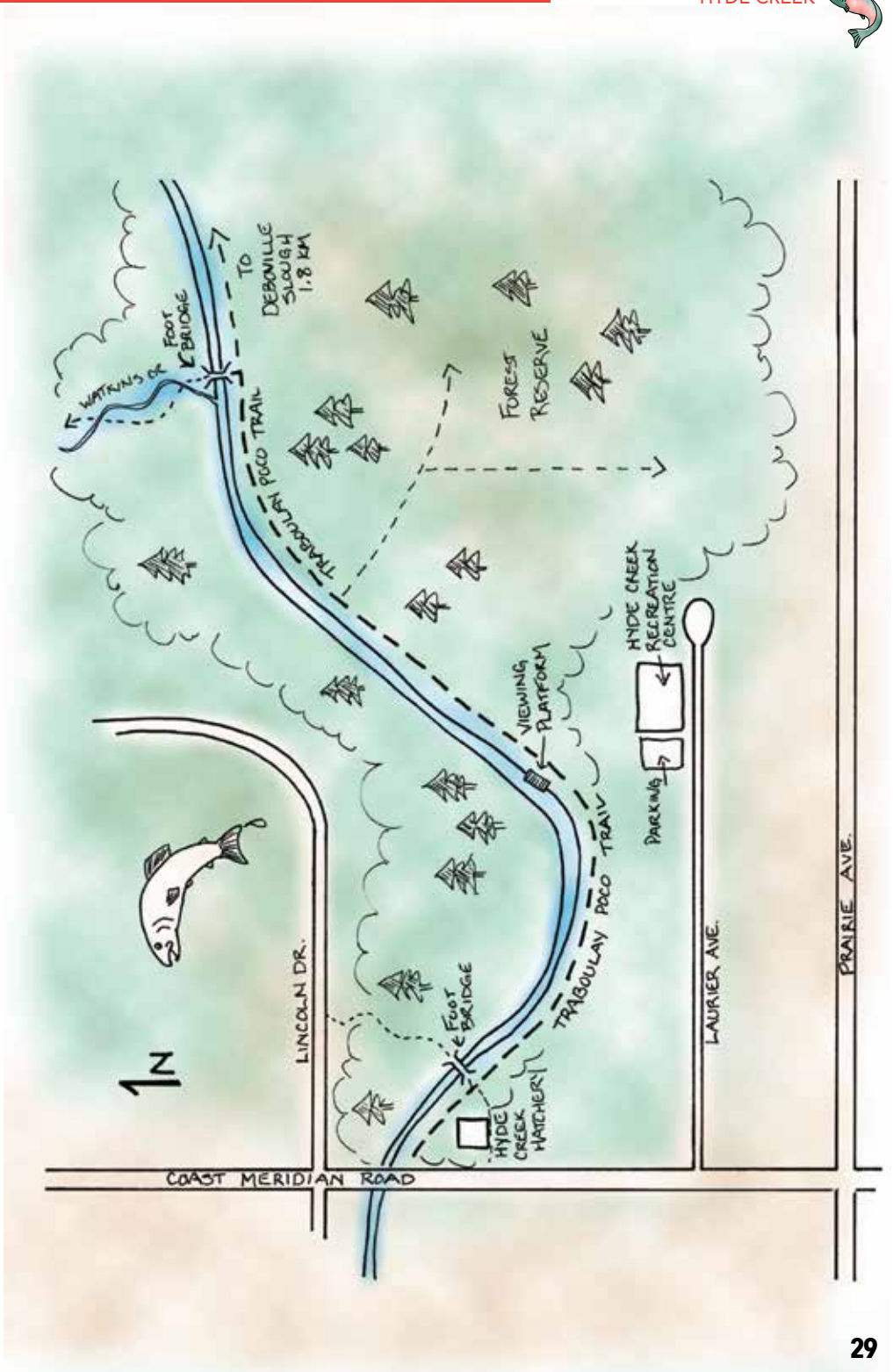
Trees and shrubs beside the creek help to keep the water cool – vital to the health of salmon.

The woods nearby are habitat for the barred owl. It's easy to remember its call: *"who cooks for you, who cooks for you-all".*

Bears come to feast on salmon in spawning season, often hauling the fish into the forest. Decaying fish help to fertilize the trees and other plants.

**Did you know?**

Hummingbirds can hover and fly straight up, down or backwards. Rufous hummingbirds winter in Mexico. They return in spring to feed on nectar from salmonberry blooms.



# Let's Explore... Hyde Creek!

Hyde Creek hosts a dramatic event every fall when salmon return from their years at sea. Coho spend their first year in fresh water then migrate to the ocean and return as three-year-olds. Chum leave the fresh water for the ocean after they hatch then return as three-or four-year-olds. The best time to view this special wildlife spectacle is mid-October to mid-November. Can you identify which are coho and which are chum?


salmon redd

Salmon lay their eggs in gravel at the bottom of the stream. Watch for a female (doe) flipping her tail *(splish splash!)* to make a **redd** for her eggs.

Salmon die after they have finished spawning, and then maybe a raccoon, bear, bobcat or coyote will make a meal of them.

Bigleaf maple trees grow along the creek. They have the biggest leaves of any Canadian maple. In the fall look for their seeds falling like little helicopters.


bigleaf maple with seed


black cottonwood

Black cottonwood, with its heart-shaped leaves, is another tree to look for. In spring, when cottonwood buds open up, the air is full of their wonderful spicy aroma.

Western redcedar with its bell-shaped trunk and shreddy bark is easy to identify. To First Nations it is the 'tree of life' for making canoes, blankets, ropes and tools from the bark and wood.

Beneath the trees are shrubs like red elderberry and thimbleberry. Many birds feast on their fruits. Rub an elderberry leaf – does it smell like peanut butter? A thimbleberry leaf is shaped like a maple leaf, but it's soft and hairy. Make sure to feel it – gently!


elderberry branch with flower

Plants along Hyde Creek and in the forest support insects. The insects are food for small birds like the black-capped chickadee. Listen in spring for its "tea-time" song (some say it sounds like "cheeseburger"). You might also hear the robin sing "cheerily, cheer-up". Spotted towhees and song sparrows love to scratch amongst the dead leaves looking for seeds and insects.


downy woodpecker


bear tracks

Most animals are secretive so you'll have to be a detective and look for clues including droppings, tracks, and feeding places.


vine maple leaf


orb web spider


black-capped chickadee


female and male chum


coho

creek bed

belted kingfisher

DeBoville Slough is a freshwater tidal wetland. At one time the **slough** was part of a much larger wetland. Now it's contained by **dikes**.

The dikes protect the surrounding farmland that has been farmed for over 100 years. DeBoville Slough flows to the Pitt River. It is a year-round **habitat** for many birds, mammals and amphibians.

# DeBoville Slough

## HABITAT, FLORA, AND FAUNA

DeBoville Slough flows through a mixed grass and shrub wetland. The tide comes in twice a day, forcing water from the Pitt River into the **slough**. Willows, hardhack and black hawthorn grow here as they like the wet conditions. Bears and some birds feed on the hawthorn fruits. Black-tailed deer are often seen in the blueberry fields bordering the slough.

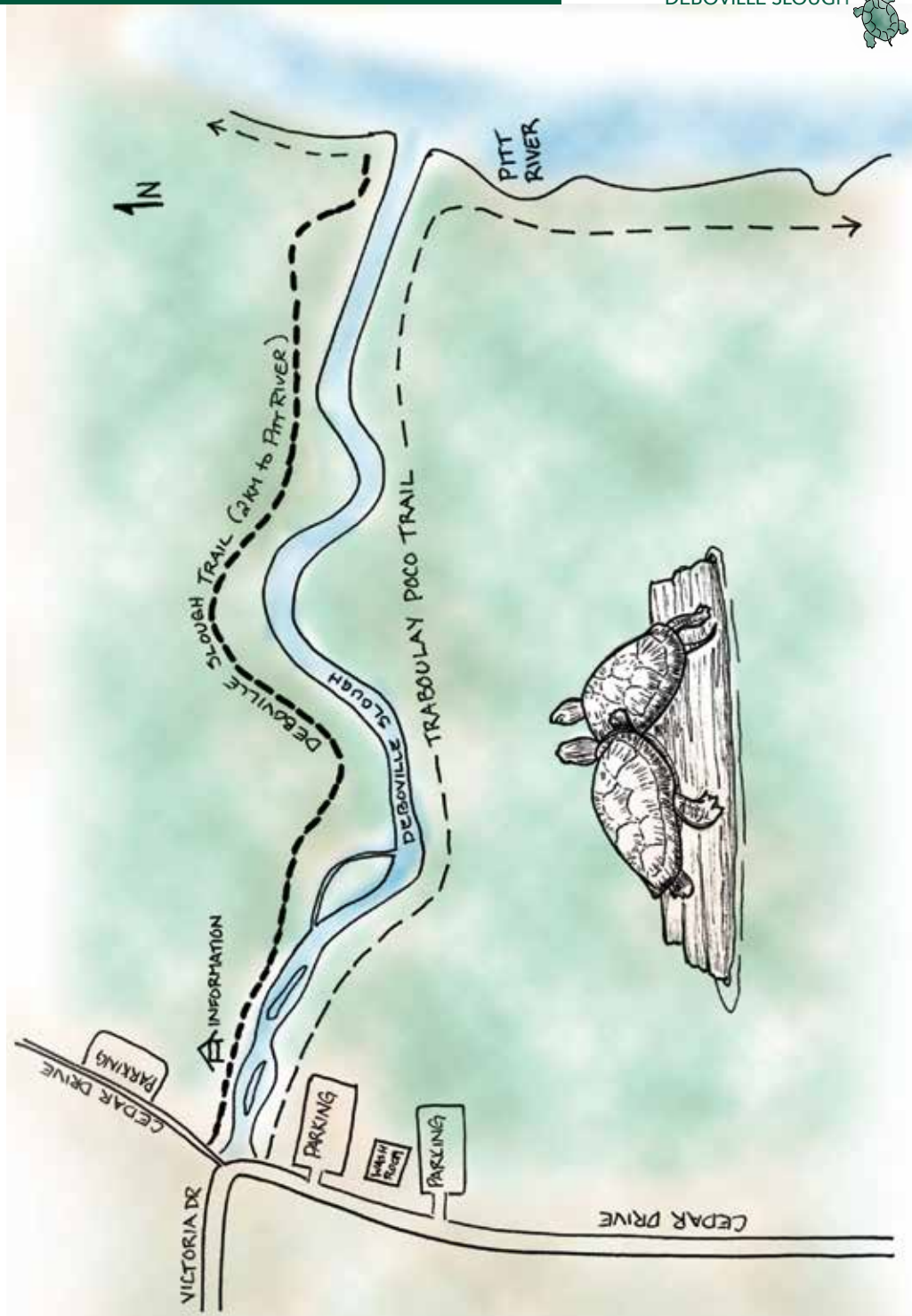
black hawthorn

In the side channels turtles bask on floating logs. Waterfowl such as mallards, gadwalls and wigeons can be found year-round. In winter the small bufflehead and the larger common merganser are regular visitors. In spring, this important wildlife area is a nesting location for birds such as common yellowthroat, wood ducks and marsh wrens. Belted kingfishers perch on shrubs searching for small fish, while high in the cottonwoods bald eagles have a great view of the area. Watch for osprey soaring above the slough in search of fish.

cedar waxwing

**Did you know?**

At low tide, crows scoop up live clams and drop them from a great height onto the dike to crack open the shells.



# Let's Explore... DeBoville Slough!

Near the start of the trail on the north side is a kiosk with information and a map. Past the kiosk, as the slough widens, look for bear trails – flattened troughs of vegetation on both sides of the **dike**. Black bears are attracted to the blueberry fields, blackberries, and native fruits like Pacific crabapple. Here, the slough is mostly filled with reed canary grass and hardhack.

Pacific crabapple

Along one of the channels is an area of willow plantings. Willows provide shade for the water and their leaves harbour insects for birds and fish. Their roots help make the soil more stable.

Pacific willow

cottonwood tree

In the fall watch for the blue Steller's jay, B.C.'s provincial bird. They carry hazelnuts from the nearby farms to hide them on the lower slopes of Burke Mountain.

black bear

dike pathway

Farther along, the drainage ditch is full of water and sheltered by fairly large trees on either side. Listen, can you hear the frogs? The slough is home to Pacific chorus frogs and green frogs. Look for turtles basking on sunny days. If you have binoculars, look closely to see if you can identify the turtles. If they don't have a streak of red on the side of their heads, they are most likely native painted turtles.

Pacific chorus frog

western painted turtle

In secluded areas under the branches you might see wood ducks. These colourful ducks nest in tree cavities and their toes have small claws to grip branches. If they can't find natural cavities they will lay their eggs in man-made nesting boxes. The chicks jump from the hole and flutter to the ground within 24 hours of hatching.

wood duck

As you continue along, there are fewer trees and the slough is more open. In the spring, male rufous hummingbirds perform display loops, flying high into the sky, then diving low where they make loud buzzing sounds. In summer the fragrant Nootka rose blooms along the **dike**. In fall their red rosehips make a bright display and provide food for deer.

Nootka rose

black-tailed deer

rufous hummingbird

slough

## GLOSSARY

**Aquatic:** growing or living in or near water
**Camouflage:** colours or patterns that helps animals hide from predators
**Coniferous:** a tree that bears cones
**Crustacean:** invertebrates, mostly marine in distribution, which have a shell, segmented body parts, jointed limbs and two pairs of antennae (e.g.), lobster, crab, barnacle, shrimp
**Dabbling duck:** a duck that feeds on vegetation in shallow water
**Deciduous:** a plant that sheds its leaves every year
**Dike:** a raised wall or embankment built to reduce flooding
**Flora:** the plants of a particular habitat
**Fauna:** the animals of a particular habitat
**Forage:** to search for food
**Habitat:** the natural environment occupied by an organism
**Intertidal:** the area which is under water at high tide and exposed at low tide
**Invasive:** a non-native species that tends to spread
**Invertebrate:** animals that do not have backbones, e.g., worms, slugs
**Leaf litter:** decomposing vegetable matter from plants
**Membrane:** a thin flexible sheet of skin
**Moult:** to shed feathers, hair, skin or shell to make way for new ones
**Midden:** a mound containing remains of shells, bones and other items from an old village or camp
**Mollusc:** an invertebrate with a soft body and usually a hard shell
**Mudflat:** a stretch of muddy land left uncovered at low tide
**Nurse log:** a fallen log that provides support for other plants to grow
**Piling:** a cluster of logs driven into shallow water and bound together by cable to provide mooring or mark a channel; often called a "dolphin"
**Predator:** an animal that preys on other animals
**Preen:** to clean, arrange and apply oil to feathers
**Raptor:** a bird of prey with good eyesight, a hooked beak, and strong talons for hunting and eating small mammals, birds, rodents and insects
**Redd:** a hollow made in a river bed by trout or salmon to spawn in
**Riparian:** beside the edge of a river or lake
**Second growth:** trees or other vegetation replacing those that have been destroyed by events such as fires, floods, logging or landslides
**Slough:** a slow moving body of water
**Spawn:** release or fertilize eggs
**Succession:** the process by which a plant or animal community gradually transforms to another community
**Wetland:** the area where land and water meet; it is wet for all or part of the year



## HOW TO EXPLORE

Use these tips to help you explore and find the many wonderful things waiting to be discovered.

Walk slowly. You will see and hear a lot more if you take time to observe things around you.

Stop often. Look around you and listen. Look up. Look down. Look all around instead of always looking straight ahead. With a little practice, this will become second nature to you.

Practice roaming with your eyes. Be a nature detective and look for clues like animal tracks.

Get closer. Watching insects and spiders is fun, but you need to get up close to see them. Try kneeling down to get closer or use a small magnifying glass.

Be "sense-able". Enjoy the sights, sounds and smells around you as you explore a world of nature. Smell the flowers, tree buds or even the fresh morning air. Feel the bark of a tree or the fuzzy coolness of mosses.

Cup a hand behind your ear. This will help to make the sound of singing birds or chirping crickets much louder.

Let wildlife come to you. Find a quiet spot and sit quietly (with a friend). Listen carefully for sounds around you.

Learn to identify stinging nettle. You want to avoid touching this plant as its leaves and stems have hairs that sting and can make you itch.

Keep a nature notebook. Make a list of the things you see and hear. Write descriptions of things you find really exciting. Make drawings and colour them. In time, your notebook will become something very valuable. For example, it will help you appreciate how the seasons change.

## HOW TO BE A GOOD WILDLIFE GUARDIAN

Be sure to always put things back as you found them because it's someone's home.

Don't get too close or feed the birds and mammals.

Never release unwanted pets like frogs, turtles or fish in a green space or waterway as they often out-compete the native species that live there.

If you have a dog, keep it on a leash so it doesn't go close to the animals or their homes. You will be more successful at finding creatures if you leave your dog at home.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BURKE MOUNTAIN NATURALISTS

Wild Birds Unlimited Nature Shop

TD Friends of the Environment Foundation

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## NATURE CHECKLIST

Check off the species you find while you are exploring.

Spring Summer Fall Winter

### BELCARRA REGIONAL PARK

- ❑ shore crab
- ❑ blue mussel
- ❑ moon jellyfish
- ❑ cormorant
- ❑ rockweed

### SHORELINE PARK SYSTEM

- ❑ Barrow's goldeneye
- ❑ purple martin
- ❑ osprey
- ❑ black-capped chickadee
- ❑ song sparrow

### COMO LAKE

- ❑ osprey
- ❑ American coot
- ❑ mallard duck
- ❑ bat
- ❑ larch *(in leaf)*

### MUNDY PARK

- ❑ Douglas squirrel
- ❑ spotted towhee
- ❑ sword fern
- ❑ salal
- ❑ Douglas-fir

### COLONY FARM

- ❑ great blue heron
- ❑ barn swallow
- ❑ northern harrier
- ❑ cedar waxwing
- ❑ rufous hummingbird

### COQUITLAM RIVER

- ❑ pink salmon
- ❑ black cottonwood *(in leaf)*
- ❑ Indian plum *(in blossom)*
- ❑ American dipper
- ❑ spotted towhee

### HYDE CREEK

- ❑ black-capped chickadee
- ❑ spotted towhee
- ❑ chum salmon
- ❑ bigleaf maple *(in leaf)*
- ❑ red elderberry *(in blossom)*

### DEBOVILLE SLOUGH

- ❑ black bear
- ❑ rufous hummingbird
- ❑ Nootka rose *(in blossom)*
- ❑ Steller's jay
- ❑ bufflehead

*Additional copies of this checklist are available at the Burke Mountain Naturalists' website.*

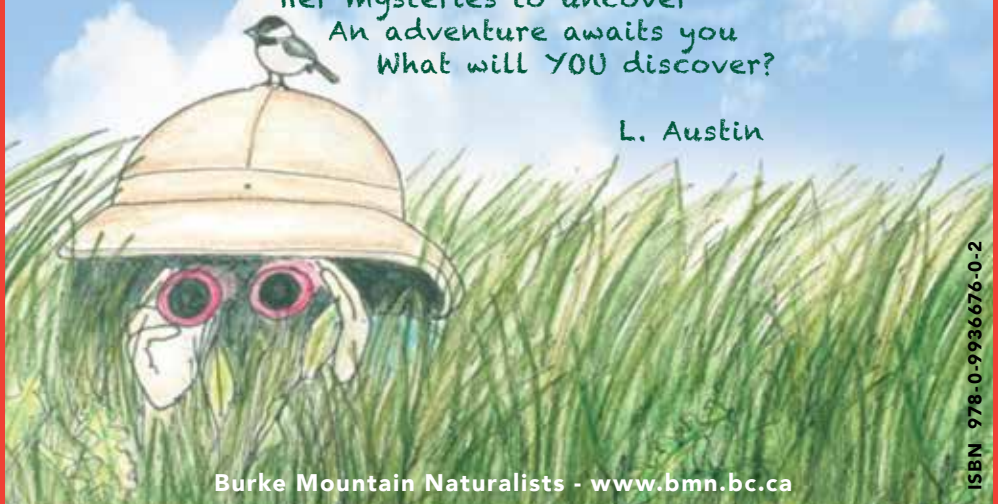
## AN INVITATION

A deep hooting call
A whirr of wings
A loudly croaking chorus
sings and sings and sings
A rustle and a squeak in the underbrush
Hear that?
See that?
Wonder what that was?

A watery shadow swims by
Bubbles trail behind
A flash of red beside the marsh
Commotion of every kind
A splash
A crash
A honk
A buzz
A lively scene, most curious!
Hear that?
See that?
Wonder what that was?

With ears and eyes wide open
Your favourite path do take
Stroll down by the ocean
or linger by the lake
Let Nature be your guide
Her mysteries to uncover
An adventure awaits you
What will YOU discover?

L. Austin



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