

## **2025 WINL Placement: Animal Descriptions**

*Short versions. >> for the Minnow wall / pop ups*

### **Mammals**

#### **Bison**

Plains bison are the heaviest land mammals in North America. They weigh over 1-2 thousand pounds as adults. Calves can be up to 30 lbs at birth! Bison have a thick, dark brown winter coat and a lighter brown coat in the summer. Bison are herbivores and graze on the grasses and sedges common on the Prairies. While feeding bison will roll around and pack soil into holes. This is called “wallowing.” Wallowing allows water to collect in these holes and provide drinking water for other animals and habitats for amphibians.

#### **Moose**

Moose are the tallest land mammals in North America. They are the only members of the deer family to not form herds. They are solitary unless raising a calf and live near bodies of water. Moose are strong swimmers (for having hooves) and during colder weather they eat underwater plants which are high in nutrients for longer in the year. They are also the only member of the deer family that will fully submerge its body in water to feed. Male moose, called bulls, have antlers that drop off every winter and regrow in the springtime. In addition to attracting females they can be useful for defense, and antlers help bulls hear better by directing sound towards their ears - so they can hear the “moosic” better!

#### **Grizzly Bear**

Grizzly bears are a subspecies of the brown bear found in North America. The largest populations occur around Alaska, but they are common in Alberta and British Columbia. Grizzlies gather around flowing rivers to catch salmon traveling inland from the ocean. Many might gather together where rivers are shallow to catch bass and trout too. Oftentimes, they only eat the skin, brain, and belly of these fish leaving the rest on shore. This provides food for foxes, gulls, and ravens and ensures nutrients are spread throughout the food chain so everyone gets a snack. How “beary” nice of them! Grizzlies have the lowest reproduction rate of any mammals in North America, meaning they are slow to parent their young. Mother bears give birth during the winter, and will parent her cubs for around two years.

#### **Beaver**

Beavers are the largest rodents in North America and have a body well suited for their semi-aquatic lifestyle. This includes a paddle-like tail it uses like a rudder and webbed hind feet for swimming. Beavers also have a double coat of fur which keeps them warm and they can produce a waterproof substance called “castoreum” which keeps them warm in cold Canadian waters. Like all rodents, the front teeth of beavers never stop growing, helping with their “gnawing” passion for building dams. Chewing logs and building dams helps wear their teeth down, like how we clip our fingernails.

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### **Beaver Dam**

Beavers are more vulnerable to predators on land than in the water and so beaver lodges function as underwater safe zones. A beaver dam is built to create a deep pond that protects beavers against predators that cannot swim and holds their food during the winter. Dams result in dramatic changes to the environment. Dams and ponds can provide nurseries for salmon and trout as deep habitats where young fish are also protected from birds. Likewise, dams can provide shelter to young frogs and toads. Beavers are a “dam” good friend to have if you live lakeside! The dam is not where the beaver lives. The dam ensures a body of water is deep enough for their lodge. A beaver lodge is a separate structure deep in the water where beavers are safe and cozy.

### **Sasquatch**

The sasquatch, or bigfoot is a large, hairy ape-like mammal that some claim inhabits the forests of North America. It is said that it stands above six feet in height and is covered in shaggy hair, like a tall gorilla. They are claimed to be shy, but territorial and have a diet of berries and leaves. Sasquatch's existence has never been proven making it a “cryptid” like the Loch Ness monster. In history, gorillas were thought to be made up cryptids too. Legends of creatures resembling sasquatch can be found across the world, like Yeti of the Himalayan Mountains, Australia’s Yowie, and Scotland’s creatively named “Big-Grey-Man.” Bigfoot was once thought to be a man or group of people living in the wild and not animals at all. Maybe a crazy man is running around in the woods or is sasquatch an undiscovered ape species? Could there be any truth to these claims?

### **Wolverine**

Wolverines are in the same family as weasels and are similarly ferocious carnivores. They are extremely strong and can kill prey several times larger than themselves including bison and moose with their powerful jaws and sharp claws. Wolverines are also known to follow wolves and scavenge what the pack leaves behind. This habit is important for ecosystem health as it removes decaying meat from the environment which reduces the spread of diseases. Wolverines have thick and oily fur which repels water and is resistant to frost. Overtrapping for their fur and reduced habitats have led to wolverines being “claws”-ified as vulnerable and they are extinct in many regions in North America.

### **Skunk**

The North American skunk possess scent glands that they use to ward off predators by spraying. Due to this, they have very few predators - mammals tend to avoid skunks unless starving. While there are some variations, generally the striped skunk has a black body with a white stripe that extends from the head down to the tail. They look “scent”-sational! While skunks are primarily insectivorous and use their sharp claws to dig in the soil for grubs and larvae, those that live near wetlands and coastal areas have been known to eat fish and amphibians. They can also eat poisonous beetles by rolling them around so they release all of their poison so they can eat.

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### **White-tailed Jackrabbit / Prairie Hare**

The prairie hare is a species of hare common in suburban parks in Western Canada; they are easily distinguished by their identifying white tails and black tipped ears. During the winter, white-tailed hares have a lighter white coat that allows them to blend into the surroundings. This coat darkens to a dull brown in the summer. This camouflage is called “cryptic colouration” and allows them to avoid predators such as coyotes and wolves. White-tailed rabbits are a solitary species and primarily feed on grasses and other green plants. Their food can be so low in nutrients that they will eat their own droppings for a chance to digest more vitamins that are more accessible after one round of digestion. They are nocturnal and only emerge at dusk to feed.

### **Pocket Gopher**

Pocket gophers are small burrowing rodents found throughout the prairies. Most gophers are brown with fur that matches the soil they live near - this allows them to camouflage and hide from predators such as weasels, snakes, and hawks. The “pocket” in their names comes from their large cheek pouches which extend all the way back to their shoulders. They really “gopher” all the food in one bite! They are commonly viewed as pests since they destroy farms and gardens by creating an extensive tunnel system to live in while hoarding vegetables, fruits, and roots. Gophers generally avoid waterways due to the possibility of their tunnels flooding but some burrows have chambers that control the amount of groundwater and rain that enters.

### **Porcupine**

Porcupines are a quill covered rodent that are usually black or dark brown with white highlights. This distinctive coloration allows them to warn other animals from getting too close - much like skunks - they want to “stick” out! Due to these quills, porcupines have few predators and many porcupines live until 30 years old. In addition to defense, quills also insulate their bodies during the winter. Porcupines are herbivores and commonly climb trees to eat tender buds and shoots. They often fall out of these trees as well and get hurt on their own quills! However, their skin contains natural antibiotics that prevent them from getting infections when they poke themselves or another porcupine. Look out below!

### **American Badger**

The American badger is a member of the mustelid family which includes wolverines, weasels, and otters. While their bodies are dull brownish gray, their heads have a distinctive white stripe down the forehead and between their eyes. American badgers are an aggressive animal, commonly “badgering” mice, squirrels, and groundhogs as prey. Badgers primarily live in grasslands where they can easily dig for prey and create burrows for cover, however, some also live near marshes with looser soil. This digging behavior aerates the soil, cleaning out bacteria that lives in airless, moist soil. This assists in nutrient turnover and creates habitats for other animals and produces helpful bacteria for the water system.

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### **Coyote**

Coyotes are small dog-like animals common in many urban and rural regions across North America. Coyotes are opportunistic feeders and have been known to hunt prey including the prairie hare and deer but also rummage through garbage and eat dead meat. They are one of the largest threats to livestock across Canada and have been caught red handed for 2.2% of sheep losses in the US. While they typically avoid swimming unless necessary, they are capable of crossing rivers and other bodies of water when necessary to find food, mates, or suitable habitat. Coyotes don't usually form permanent packs and will often travel in pairs. They may form small groups made of coyote couples which disperse after a hunt.

### **River Otter**

The river otter is a member of the weasel family that lives exclusively in North America. Otters create a burrow near the water's edge where they live and raise their young. They primarily eat fish, most commonly perch, suckers, and catfish and are able to break into beaver lodges. Since they dive and swim underwater for long periods of time, otters have see-through eyelids called "nictitating membranes." These eyelids keep their eyes protected underwater. Otters are also well known for their play - wrestling and chasing each other around waterways - this helps develop hunting skills and is "otter-ly" adorable!

### **Wild Boar**

In Alberta wild boars refer to both the Eurasian wild boar and domestic pigs that have escaped the farm. Pigs have their babies fast, and the piglets of wild parents look more like boars than farm pigs. In a few generations they are hard to tell apart from wild boars. They really go *hog-wild*! Boars are highly intelligent, and are omnivorous, meaning they eat EVERYTHING! They will eat grasses, roots, insects, rotten fruit, and other animals. Their smarts and 'pig-out' diet allows them to survive in many environments, which has displaced certain native animals across the planet. They are destructive to birds that nest on the ground, amphibians, reptiles, and consume all the food sources other animals rely on causing disruptions to the food-chain. Keep your pigs penned up!

### **Viscacha**

The viscacha is a rodent in the chinchilla family that looks somewhat like a rabbit due to its long ears. Viscachas are commonly a dull gray and blend in with the rocks in their mountain homes. They are herbivores that primarily eat grasses and herbs; they act as prey to the mountain cats and birds of prey like owls and eagles. Viscachas have a unique social structure and live communally in underground tunnels; these "sec-rat" tunnels allow them to hide from predators. Here they engage in communal care of the young and grooming in these hideaways like many rodents do. Viscacha are not native to Alberta, but are found in South America.

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### **Fish**

#### **Bull Trout**

Bull trout are in the salmon family which are sometimes called char; they are named for their unusually large mouth and head regions. Unlike other chars in their family, they have distinct white margins on their leading fins. They are also known for their long distance dispersal in the river systems - this is vital to ensuring a healthy population where trout can find mates. Bull trout can really “scale” the distance so ensuring the connectivity of our rivers is vital to their health. Bull trout are the official fish of Alberta but the population living in the Saskatchewan-Nelson river is listed as threatened by the Government of Alberta.

#### **Brook Trout**

Brook trout are river fish that are related to salmon. They have a distinctive squiggly pattern on their backs - and have red speckles all over. This pattern allows them to camouflage from predators from above and ambush prey. Brook trout are highly sensitive to water quality, thriving in clean, cold streams and, as such, they play a crucial role as indicators of ecosystem health. In some regions in eastern Canada, they are locally extinct due to the effects of acid rain and conservation efforts are underway to restore the populations. Brook trout are the provincial fish of Nova Scotia.

#### **Cutthroat Trout**

Cutthroat trout are named for the distinctive red slashes or "cutthroat" beneath their lower jaws. They are vital to the ecosystem as both predator and prey. Cutthroat trout primarily feed on small insects, crustaceans, and fish. On the other hand, they are prey for birds, otters, and other, larger fish. While secure in most areas, cutthroat trout face threats due to habitat loss and breeding with other species like rainbow trout. When cutthroat fish interbreed with rainbow trout, their children are called “cutbows”. Cutbows tend to look more like cutthroat trout with similar red slashes under their jaws. On the coasts cutbows can breed on their own without mixing species. It is important for environmentalists to make sure that cutthroats do not get replaced entirely by their new cousins and allow everyone to thrive.

#### **Mountain Whitefish**

Whitefish are one of the most commonly found fish in Alberta. These fish are highly adaptable and are often found in large populations near hydroelectric dams. Mountain whitefish are “demersal” feeders, meaning they use their fins and tail to stir up the silt and rocks at the bottom of the lake to expose the aquatic insects they eat - they really put the “rocky” in Rocky Mountain whitefish! As whitefish prefer cool, clear, and clean waters, they can be used as a good indicator species for the health of a water body. If they are sick, assume that something is poisoning the water. Because they kick up lots of mud when they hunt they also may stir up pollution on the bottom of the lake.

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### **Walleye**

Walleyes get their name from their large, silver eyes - they have no trouble “sea-ing”. Since walleyes have such good vision, they avoid brightly lit waters and feed on fish in deeper regions of lakes. If they are attacked their dorsal fins are tipped with sharp spines. Walleye grow relatively fast compared to other freshwater fish and can live for over a decade. These fish are sometimes mistaken for pickerel but true pickerel are only present in Eastern Canada. Fried walleye is considered a staple in Canada, thus fishing for them is regulated by the government to avoid overfishing walleye populations. The walleye is the provincial fish of both Winnipeg and Saskatchewan.

### **Northern Pike**

The northern pike get their name from their pointed head and mouth which look like a medieval pike - a really long spear. Northern pike are ambush predators which hide out in the weeds of shallow waters and attack other fish. They’ll take any “oppour-tuna-tee”! When food becomes scarce, northern pike are known to engage in cannibalism and eat smaller members or even their own young. Since they are apex predators known to aggressively feed on native fish and some get large enough to feed on ducklings. They are such voracious predators that they are sometimes called “water wolves” or “slew sharks.” Pike are prey to otters and birds of prey.

### **White Suckers / Suckerfish**

White suckers are named for their fleshy lips that they use to suck up sludge from the bottom of rivers and streams to find food. Despite being called “white” suckers, they are usually more gray or olive green in color. White suckers are able to handle polluted waters and are highly adaptable to a variety of habitats. This is because the bottoms of lakes are already full of harmful bacteria, so human made pollution is tolerable to an extent. These fish are an important part of the ecosystem - they regulate bottom dwelling organisms which they feed on and are also important prey for larger fish. Larger fish, including the walleye and northern pike.

### **Lake Sturgeon / Rock Sturgeon**

Lake sturgeons are the largest fish in Alberta and can grow to be 10 feet long. They have inspired stories of lake monsters and sea-serpents like the Loch Ness Monster and Canada’s Ogopogo! Though they are called lake sturgeons, these fish only live in rivers and are mostly found near the bottom where they feed on insects and fish eggs. Lake sturgeon take a long time to reach maturity and can live up to 150 years old. When female lake sturgeon get “roe-mantic”, they can lay up to 500,000 eggs. These eggs are prized as caviar (a fancy dipping sauce), and have resulted in lake sturgeon being overfished in some regions. Habitat destruction reducing its living space makes Lake sturgeons an endangered species.

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### **Burbot**

Burbots appear like a cross between a catfish and an eel. They have a single whisker on their chin and swim with a snakey motion. Burbots have small fins which are suited to living on the bottom of lakes and streams - since they are poor swimmers there's not a lot they can do about it. Burbots prefer cooler waters and breed under the ice during winters and early spring. As adults, burbots are voracious predators and prey on whitefish, young northern pike, suckers, trout, and perch. Due to this, some regions require anglers to kill burbot if caught. Luckily, burbot is edible, and tasty! In Finland it is considered a delicacy.

### **Goldfish**

Native to eastern Asia, goldfish are one of the most common aquarium fish in the world. They are found in urban stormwater ponds where they have been illegally released. Goldfish lose their bright orange color in the wild and become identical to another invasive species in Alberta - the Prussian carp - you can't tell what's the "reel" deal anymore! These fish are extremely hardy and can thrive in poor quality water where native fish cannot survive. On top of being endless eaters and poopers, goldfish are also prolific breeders. They can lay up to 1000 eggs per spawning period in late spring. They can also introduce non-native pathogens to the waterways so it is important to know how to care for goldfish pets before you buy one so they don't get dumped.

### **Prussian Carp**

Prussian carp are medium-sized fish in the same family as goldfish and minnows. Like goldfish, they are an invasive species in North America. In addition to reproducing rapidly, Prussian carp can steal the sperm of other fish to fertilize their own eggs. They really "carp-e diem" and seize the day- and the sperm! These eggs become clones of their Prussian carp mother. Through this strategy, they can establish a large population and push out native species in ponds and lakes. The eggs of a Prussian carp can also survive the digestive tract of birds and ingestion by birds might serve to spread their eggs into new waterways. That's one way to fly, but I'll stick to airplanes!

### **Rainbow Trout**

Rainbow trout have colors that vary between subspecies and regions but adults are usually blue-green with black spotting all over the body. Freshwater and river-living rainbow trout weigh up to five pounds, but trout travelling from lakes to the ocean can get up to nine pounds. Habitat loss, invasive species, and diseases are resulting in some subspecies becoming extirpated; this means they are locally extinct in some regions. Rainbow trout are considered prize fish among fishers; once hooked they put up a strong struggle and leap off the hook - you could say that they have a strong "fin-ish"

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### **River Redhorse**

The river redhorse is a freshwater fish found throughout the eastern United States and Canada. River redhorse have a robust, rounded body with red fins and tail. These fish are bottom feeders and feed on aquatic bugs. As they feed, they sift through the mud on the bottom of water bodies and are important in nutrient cycling that would be trapped in the muck. They primarily feed at night and stay in deeper regions during the day to avoid predation. River redhorse are sensitive to environmental conditions and can be used as a good indicator species for the “stable-lity” of an ecosystem.



## **2025 WINL Placement: Animal Descriptions**

### **Birds**

#### **Mallard**

Mallards are a dabbling duck species that are common in urban parks, lakes, and are seen in human-made water features. Dabbling ducks feed mainly at the surface of water instead of diving underwater. They will swim with their tails in the air while they grab food with their beaks. Females generally have brown speckled feathers while males have distinctive iridescent green heads. Due to their calm nature - they are never in a “fowl” mood - mallards are tolerated by humans and pose a risk as an invasive species to native duck species. Mallards have many predators and sleep with one eye open allowing them to always be on the lookout!

#### **Common Loon**

Loons, also called divers, are medium sized black and gray birds that are famous for their call. They are also expert fish chasers. These birds catch and swallow their prey underwater after diving up to 60m! Fish account for about 80% of their diet and include common Alberta fish such as northern pike, burbot, and walleye. Over 30 weeks a family of two adults and 2 chicks can eat a literal tonne of fish! Loons are monogamous and couples stay together for over a decade raising new clutches every year. They are the provincial bird of Ontario and appear on the Canadian one dollar coin - that we often call the “loonie” instead.

#### **Cardinal**

Cardinals are a perching songbird commonly seen in a variety of habitats throughout North America. While males are the distinctive bright red associated with their species, females tend to be more reddish olive in color. Cardinals primarily eat grains but the young are almost entirely fed on insects. The Males are highly territorial and another male in their territory will have them “seeing red”. Male cardinals defend their territories by local vocalizations and aggressively flapping and pecking. Mates may stay together for several years but they are not necessarily monogamous and can separate between seasons.

#### **Raven**

Ravens are large black birds that are a part of the corvid family with crows, magpies, and blue jays. They have lived in human settlements for thousands of years and their omnivorous and opportunistic feeding patterns have led to an expansive range. Ravens are larger than crows and have a heavier beak. While they are present throughout a variety of landscapes, they prefer coastal regions for its easy access to food, nesting sites, and more temperate weather. Ravens have a distinct croaky call and sometimes gather together to form a “crow-chestra”! They are devoted to their families and engage in communal raising of young and feeding.

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### **Red-winged Blackbird**

The red-winged blackbird is named for the distinctive slashes of red on the wings of male birds. The males and females of the species look different. Female red-winged blackbirds are a dull dark brown - definitely not as “eggs”-citing as their bright counterparts. This difference is called “sexual-dimorphism.” Red-winged blackbirds are a common site in marshes and ponds throughout North America where there is abundant food and nesting sites. They play an important ecological role by controlling insect populations and also as prey for snakes, and small mammals. Their presence indicates a healthy and productive wetland ecosystem making them a good indicator species.

### **Great Blue Heron**

The great blue heron is the largest heron in North America and is commonly seen in wetlands throughout Alberta. These birds are migratory and fly to the southern US during the winter. Herons rarely wander far from wetlands and they nest in bushes and trees near the water's edge. Herons primarily eat small fish but have been known to opportunistically prey on amphibians, snakes, and even mice. They will wait in the water completely still for a fish to come by for their snack. They swallow their prey whole and sometimes choke on them because of their long necks - they definitely “egret” some of their actions! Adult herons have few natural predators but their eggs are preyed upon by other birds including ravens and hawks.

### **American White Pelican**

American white pelicans are large aquatic birds that have distinctive beaks with a throat sac that expands. The northernmost colony is found on the shores of Slave River between Alberta and the Northwest Territories. These pelicans have an enormous appetite and eat up to 4 pounds of food per day - they really rack up a huge “bill.” Unlike the heron, instead of diving for fish, pelicans capture prey while swimming. Commonly eaten fish include the perch, rainbow trout, and carp. Pelicans are colonial breeders, meaning pairs all gather at a single site and mate and incubate their eggs together.

### **Golden Eagle**

The golden eagle is the most common eagle species seen across North America. Despite their name, golden eagles are primarily dark brown with their namesake golden colouration only present at the back of their heads. They commonly nest in wetlands due to an abundance of prey, and ample vegetation. Golden eagles primarily eat small mammals such as hares, and ground squirrels. They often go through periods of famine and then subsequent gorging when they do find prey. Their “talons” are a bit iffy! Only 1 out of 5 hunts is successful, but the odds increase when breeding pairs team up. Approximately 4000 eagles pass through Alberta annually which is the largest migration of golden eagles on earth.

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### **Bald Eagle**

The bald eagle is a large bird of prey found throughout Canada and Alaska. While the bald eagle is mostly an opportunistic feeder and will feed on rodents and other small mammals as it comes upon them, they primarily eat fish and live near large bodies of water. Despite their names, bald eagles are not bald - the feathers on top of their heads are white. They also do not make the signature call they do in movies. They make a screeching sound while the cry they are given actually belongs to the red-tailed hawk. They are highly “talon-ted” hunters and swoop down to catch fish near the surface of the water. While for many years they faced extirpation, local extinction in the United States, now populations have rebounded and they are considered secure.

### **Bluejay**

The bluejay is a small bright blue bird from the same family as crows and ravens. Bluejays feed on nuts and grains, invertebrates, and soft fruits. They sometimes “cache” food, meaning they store food for eating later. These birds are very aggressive to other birds and sometimes even decapitate them; they have also been known to scream and chase away other birds of prey such as hawks and eagles. Like other corvids, they are highly intelligent and have been shown to use tools in captivity. Blue jays mate for life and produce one clutch of eggs annually.

## **2025 WINL Placement: Animal Descriptions**

### **Reptiles & Amphibians**

#### **Tiger Salamander**

Tiger salamanders are one of the largest land salamanders in North America; they have distinctive dark yellow spots on a black body that gives them their name. These salamanders commonly eat small insects, snails, and slugs but when they don't get enough "newt-trition" are commonly known to cannibalize each other! While the adults are terrestrial- live on the land, wetlands provide ideal breeding locations due to loose soil for them to burrow and ample prey. The larvae (a salamander tadpole) are fully aquatic and have large external gills. Like other amphibians, tiger salamanders are a good indicator for the health of an ecosystem because they are so sensitive to pollution.

#### **Painted Turtle**

The painted turtle is a native species of turtle in North America adapted to freezing temperatures by having an antifreeze-like substance in their blood. They "slow down" and hibernate in the winter by digging into the mud on the bottom of ponds. This turtle is commonly found in wetlands and is the only turtle native to Alberta. Painted turtles feed in the water and eat vegetation, insects, and small fish. They are named for the distinctive markings in red, yellow, and orange on their underside and face. Common predators of turtle eggs include crows, foxes, and garter snakes.

#### **Leopard Frog**

The northern leopard frog is a large frog found in the United States and Canada. Leopard frogs are mostly green with dark black/brown spots across their body like their namesake, the leopard. These frogs are commonly found near waterbodies with abundant vegetation, usually flooded areas in forests. Leopard frogs primarily eat insects and are prey for snakes, and raccoons. Unlike other frogs, leopard frogs do not release secretions from their skin that stop predators - when a predator attacks them, they just "jump" into action and run away. Leopard frogs are also extremely fast. Their skin is still special, because they use it to breathe while they are wet. These frogs are an active target of scientific research since proteins in their eggs have been studied as potential drugs for cancer.

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### **Insects & Invertebrates**

#### **Autumn Meadowhawk**

The autumn meadowhawk is a dragonfly in marshes, ponds, and slow streams in the Great Plains and west coast of North America. Naiads - young dragonflies - feed on other insects including mosquito larvae and freshwater shrimp during their growth underwater. The naiads live on the bottom of lakes and ponds and when they have eaten enough food, emerge at night as adult dragonflies. Once they take to the skies they eat all soft bodied insects. Dragonfly males don't need a "wing"man and attach themselves to females after mating - this is called flying in tandem. Females then lay eggs on the surface of the water.

#### **Monarch Butterfly**

Monarch butterflies live all over the world and are the most famous butterfly in North America. They can be found in southern Alberta during the summer and migrate in massive groups south to Mexico in the winter. The butterfly begins its life as a caterpillar which eats endlessly until it becomes a chrysalis. Inside the chrysalis the caterpillar breaks down its body into a digested goop that then forms into the adult butterfly. They are not actually 'inside' their chrysalis, they are the chrysalis. The adults only live for about a month more after they transform. The journey south started every year is completed by a butterfly's great-great grandkids! What a road trip!

#### **Bee**

Bees are famous for their honey, which they feed to their young. Only honey bees make anything worth a slice of toast, but there are many other species of bees in Alberta like the: carpenter bee, digger bee and the wobbly bumble bee. Not all bees live in colonies, and those that live on their own are typically less likely to sting. Those that do sting, usually only do so while defending their hive rather than defending themselves, unlike wasps. All worker bees are female, and leave the hive in order to take nectar from flowers. Many bees are drawn to bright colours like red and pink. When bees land on a flower they take some of its pollen with it to the next flower. They play an important role in a plant's "pollination" cycle and allow flowering plants to make seeds that grow into more flowers.

#### **Crayfish / Crawdad**

Northern crayfish (also called crawfish or crawdads) are a species of crayfish that resemble little gray lobsters and are found under stones and logs in shallow ponds and lakes. They hide in these spots from predators such as fish and bigger crayfish. Northern crayfish feed on invertebrates and plant matter on the bottom of waterbodies. They use their powerful front claws to dig into the mud of lake beds and forage for food. Northern crayfish are nocturnal to avoid sunlight and predators. They are a bit "shell-fish" and are considered invasive in Alberta, encroaching on the natural habitat of other, native crayfish species. They can travel on land to other bodies of water that are close by, so in rain or flooding they may be up for a pond-swapping invasion. In some areas, the northern crayfish is used as bait.

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### **Prairie Bluet**

The prairie bluet is a blue damselfly common in North America. Unlike dragonflies, damselflies have delicate and slender bodies but they're no "damsel" in distress and have an important role in controlling the populations of aquatic insects as voracious predators. An easy way to tell them apart from true dragonflies is that they land with their wings closed above them and dragonflies land with their wings spread out flat. The prairie bluet is prey for birds and fish. Males prairie bluets court females through incredible aerial displays. After mating, females lay eggs on aquatic vegetation and nymphs emerge underwater. They undergo several molts before emerging as adults. Prairie bluets hibernate for part of the year in dense vegetation and enter a state of dormancy before emerging in the spring again.

### **Eastern Tiger Swallowtail**

The eastern tiger swallowtail is a butterfly seen throughout Canada; like its tiger namesake, it has bright stripes with distinctive black banding patterns and their caterpillars are bright green. Adult tiger swallowtails, like bees and other butterflies, are important to the ecosystem as pollinators and ensures flowering plants are able to make seeds. Depending on their location, there might be one or two generations of these butterflies annually. During courtship displays male tiger swallowtail butterflies do "wing"tastic aerial stunts to impress females. Females then lay eggs singly on the underside of plant leaves. After caterpillars emerge, they fold the leaves making a safe little pouch so they can grow throughout the fall and re-emerge as adults.

## **2025 WINL Placement: Animal Descriptions**

### **Plants**

#### **Fireweed**

Fireweed is a common perennial flowering plant in North America; they are easily recognizable by their red stems and bright magenta flowers. Fireweed is named due to it being one of the first plants to bloom after forest fires on burnt and cleared land. This is due to fireweed seeds remaining viable in the soil for many years without germinating. Some plant seeds require fire in order to begin growing and will wait for a fire to burn down an area before they pop up. Plants that benefit from fires are called “pyrophiles.” That's quite a “florist” fire! This is important as land can be susceptible to erosion without plant roots and fireweed provides important vegetation cover and food for animals. Bears and elk love to eat fireweed, and in the Yukon, the flowers are turned into jelly.

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*Long versions >> for wiki; website; other information.*

*Each paragraph can be taken out and slotted wherever desired.*

*Paragraphs pertain to: Animal morphology & behaviour, Wetland interactions, Interactions with other species on “the Minnow,” Conservation efforts, Fun facts / extra. (Fun fact = moose domestication has been attempted). Extra info = antlers, moose are only entry with them, so intraspecies competition could be basically explained.*

### **Mammals**

#### **Bison**

Bison play an important role in prairie ecosystems when they “wallow.” Wallowing is when Bison lie in dirt and mud and roll around, coating their bodies. A layer of dirt helps the bison to repel insects who can’t get through the muck, and to cool down in the sun. When bison finish, their wallowing leaves behind ruts and holes in the ground where water can collect. This water feeds the grasses of the prairies and provides drinking water for other animals. Small water loving animals like frogs can even make these little ponds their homes.

There are two species of bison in North America, the plains bison and the wood bison. Wood bison can weigh up to 2000 pounds and can grow up to eleven feet in length. Males can stand over six feet tall at the shoulder. Woods bison also have darker fur than their plains cousins, bigger shoulder humps, and are less shaggy. The main difference is where they live: on the plains, or in the woods.

Bison used to be widespread in North America, but overhunting in the 1800s dropped their populations from over 500 million, to only 85. Since then they have been making a slow and steady comeback. Bison are also raised on farms all over Alberta. Due to farming, many bison alive today are not “wild” bison, and have DNA from domesticated cattle. Wild bison are those who do not have any DNA from farm animals. Across Canada there are over 3000 wild wood bison and 1500 plains bison.

16 Bison were introduced to Banff National Park in 2017. In 2020 their numbers had increased to 50!

#### **Moose**

Moose are members of the deer family alongside caribou, white-tails which live in the forests of Canada, Alaska, and northern Eurasia. Even though they are in the deer club they have many distinct behaviours that separate them from their cousins. The most notable is their solitary lifestyle. Most deer species form herds where they use the eyes and ears of the group to survive. Moose prefer to live alone and have few predators due to their size. Their size also allows them to be more aggressive than other deer and can be dangerous to people, so be careful.

A major feature of moose and other deer is their antlers, which are very different from horns. Antlers can be used for protection against predators, but they are used for attracting mates. Female moose are attracted to larger antlers, and males who can use them to headbutt other males out of the contest. Antlers, unlike horns, fall off and must regrow for each mating



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season. Horns have a core of bone, but antlers grow back with a soft, fuzzy outside before they harden into the moose's signature crown.

Another major difference between moose and other deer is their love of water. Moose have evolved several traits that aid them in eating plants while they are submerged in the water. Their fur insulates their bodies from cold water and also helps them float. They need the extra floatation as hooves aren't the best for swimming, but their height allows them to stand in deep or flowing water to escape wolf packs. Moose also have special noses with flat shaped nostrils which are much larger than other kinds of deer. On top of smelling out danger from far away their nostrils are shaped this way to allow them to close underwater. When they dunk their face down to eat they aren't getting a mud-water swirl. That's a function for your fashion!

Something people overlook as a similarity between moose and other deer is that they should not be ridden! However, in the 1800s the King of Sweden attempted to replace his army horses with moose. Some moose were trained to accept a rider, but commanding them was difficult and they would run from battle unlike horses. Animals like horses and dogs can work alongside people as they have been trained to do so for generations through "domestication." Early humans worked with these animals to make them naturally adapt with us and to try to train a wild animal because it looks like a horse or a dog can be dangerous.

### **Grizzly Bear**

Grizzly bears of North America live solitary lives except when raising their young and when there is plenty of food. Bears are big eaters and are not picky with snacks. They are able to take down prey like deer but they are just as likely to eat berries, roots, or go fishing. They'll sit down to eat with each other around the buffet if there is enough to go around. Bears are "opportunistic eaters" which means they do not have a specific diet, like people! In rural communities it is often warned to keep garbage cans locked so bears aren't attracted to the food waste. Being opportunistic means bears remember where they've gotten food and are likely to come back again. This is why you never feed bears. They'll think someone else will have food and come into towns searching.

When bears catch salmon by the river they will leave parts of the carcass behind after they finish eating. The extra bits of meat left will feed other animals who come by for the leftovers. Scavenging animals, like crows, magpies, and coyotes help keep ecosystems clean by removing rotting meat and disease by eating it. Another common scavenging animal is the grizzly bear itself! They will eat relatively fresh dead meat often scaring the smaller scavengers away. If there are two bear siblings, or a mating pair they are easily able to steal fresh meat away from wolves.

Bears have to eat a ton of food because they have to bulk up for winter. During summer and autumn bears are constantly eating so that when the cold comes they can go to sleep and wait out the snow. This is called "hibernation" and many animals are capable of some kind of long sleep like bears. By the time fall comes a grizzly bear could have gained several hundred pounds to prepare. They can pack on three pounds a day, which is about how much food a person eats in a single day. During hibernation bears are not fully asleep the whole time. Bears will wake up from sleep quickly, which is different from other kinds of hibernation. This means bears can have cubs during the winter in the safety of the den. The cubs weigh about one pound at birth even smaller than a newborn baby, but emerge thirty times bigger in spring!

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### **Beaver & Dams**

Beavers are well equipped to cut down trees, and build their homes. They use their chisel-like teeth to gnaw through most of a tree trunk and let the wind finally push it over. Beavers will then take the logs from the trunk and float them down a river, allowing them to move hundreds of pounds of building materials with ease. Using the rivers is the main way a beaver travels as they are too awkward on land to escape predators. Luckily their paddle tails don't only help them swim, but allow them to pack mud into the walls of their lodges to keep the hunters away. The beaver dam and lodge are essential for Canadian wetlands as beavers create ponds that many species require. The massive role beavers play in the wetlands makes beavers a "keystone species." They play a *key* part in it. Luckily for us, they are not endangered and are able to keep swimming along to their next pond.

A beaver will create a dam that blocks the flow of a river. Then the pond that is formed is deep enough that the beaver can build a lodge with an underwater entrance, food storage, bedding and a chimney! Just like when they listen for a tree cracking, they will listen for running water or dripping and plug it up ASAP. It becomes an ideal place for beavers to stay during winter where they are active throughout the cold months. They use their food stores to eat the soft woody part of twigs underneath the bark and will go under the ice to search for lake plants through the underwater entrance. They do not hibernate but do stay cozy inside all winter.

A beaver lodge is an ideal place to raise their young. Beaver lodges can have numerous beavers living inside. Oftentimes there are two parents and their litters of up to four babies called "kits." Beavers will have litters each year, so there are often three generations living together.

Beavers are not the only animals that benefit from their waterfront property. Many moose will eat plants from the shallow side of the beaver pond and mice, muskrats and other rodents may eat from the food stores the beaver has gathered. Frogs and fish gather to live in the ponds and birds are able to snack on the bugs and plants that grow there.

### **Wolverine**

Wolverines live in the tundra and snowy forests of Alberta and further north. They are fierce predators that have evolved to compete with wolves and bears despite their small size. Like many members of the weasel family, the wolverine is incredibly violent and is known to fight so ferociously that small wolf packs can be chased away from meat they just finished catching. Also like other weasels, (except sea otters) the wolverine is a mustelid and is named so for its scent glands that are overly pungent. If they claim meat off of another animal they will use these glands to spray their food with a stinky smell that makes other animals think twice about eating their food.

Even though wolverines are able to fight off predators and even hunt large prey they mostly eat carcasses they find that are frozen and buried. They have an incredible sense of smell that beats many animals living in the same environment. They are able to smell meat that is not only frozen stiff, but it may also be several feet under the snow. Wolverines are able to dig out the carcass and crunch the frozen meal with special teeth that are flat and good for crushing rather than slicing. Similar to our molars which are much thicker than our front teeth. Their teeth are so much stronger that they can not only eat frozen meat, but bones, hooves and the

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teeth of their prey. And as one can assume, they eat as violently as they fight with their bodies often crammed inside their meal.

Wolverines are solitary and never tolerate each other as well as any other animal. The only time they do not attack is during mating and that meeting might not last long either. Female wolverines have the ability to delay their pregnancy until they are safe and alone in their den essentially choosing when her babies start to grow. This is extremely useful for the dangers of the harsh north where they live.

Wolverines were only recently declared to be ‘threatened’ as their population and habitat decrease due to climate change and the slow warming of the northern tundra where they thrive.

### **Skunk**

The signature weapon of the skunk is its stink. But a skunk only has so much spray before it needs to make more which might take days. This means that skunks often give plenty of warning before they spray which is usually enough for most predators to stay away from them. Skunks are very smart and are usually able to get away without spraying. They are smart enough to know to pick the poisonous parts off of insects before eating them. This lets them eat plenty of bugs that would otherwise be well protected. Lots of the bugs and other prey they eat are considered pests and having them gone is useful to farmers. They mainly feed on insects like caterpillars and small rodents like mice and voles.

Many members of the weasel family are grouped together because of their scent glands that they use to communicate. Many animals do this, it's why dogs might say hi to each other by smelling their behinds. The mustelids, which are weasels and their cousins, are known for using their “musk” to do the talking. Sometimes it marks territory or tells the animal’s mood. In the skunk’s case it’s saying “get outta here!” Skunks spray is a great defense against predators who all have strong noses.

Skunks also have a great sense of smell, but don’t seem as bothered by the stink. They are nocturnal and their eyesight is not great. Rooting around at night with bad eyes means that the skunk actually ‘sees’ with its nose. Smell is its main sense for knowing what is around it. For us, our eyesight and hearing are our best senses. Our noses are too small to be used like many snouted animals can. Would talking with stink be easier than talking with words?

### **White-tailed Jackrabbit / Prairie Hare**

White-tailed jackrabbits are not actually rabbits at all. They are the larger, faster cousin of rabbits called hares. They share many of the same body parts as rabbits but are different in many ways. While they are both big eared plant eaters they do not live or grow in the same way. Hares do not dig holes to live in, they live in tall grasses and under shrubs in meadows where they can camouflage in with the dirt. In northern regions hares have white fur and blend in with the snowy fields. Rabbits do not like to live out in the open fields, they live in groups underground in burrows called “warrens” like a little bunny city. Hares on the other hand live alone and instead of hiding underground to avoid threats, they are incredibly fast.

To avoid predators, hares can reach speeds up to sixty kilometers per hour. They are smaller than many hunters and are able to dodge and swerve much quicker than coyotes. They are also able to jump two meters in the air as well. For a threat like a weasel, a hare may be able

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to land a kick and send the weasel running. Escape is still their main option because they save their fighting for each other.

Male hares have an extreme way of impressing females. They will group up and jump into each other, wrestling and punching each other in order to show off their skills. But this is only round one for the males. The female will get up on her back legs after she picks a male and will begin to box with him with her front paws. The male has to show off his speed in this fight to prove he is strong enough to be her hubby-hare!