

Identification Guide to Species of Interest

Occurring or Possibly Occurring in

Tembec's Operating Area in Southeastern British Columbia

August 2009

**Tembec Inc.
Cranbrook, B.C.**

For more information, contact:

Tembec Forest Scientist: (250) 426 – 9380

TFL 14 Planning Forester: (250) 348 – 2211, ext. 108

Kootenay East Planning Forester: (250) 529 – 7211, ext. 220

Kootenay Central Planning Forester: (250) 426-6241, ext. 287

American Badger (*Taxidea taxus*)



Description

- Squat carnivore with short legs and long, coarse fur of mixed white, grey and brown
- Alternating pattern of black and white stripes on the head with white stripe running down the middle of the head from nose to neck, black badge on side of head
- Long claws with black lower legs

Similar species

- Unmistakable

Habits

- Excavates and lives in burrows
- Preys on many burrow-dwelling species such as ground squirrels and gophers, but will eat a variety of prey including rodents, reptiles, amphibians, and birds
- Breeding occurs in July and August, with young born in late March/early April
- Activity is generally nocturnal, centred on the den

Habitat

- Badgers inhabit open dry habitats such as grasslands, open forests, and burned areas and select areas of loose soil for burrowing
- Will also use man-made habitats such as fields, clearcuts or golf courses
- Inhabits valley bottoms of the Interior Douglas-fir and Ponderosa pine biogeoclimatic zones, though may be found up to and including alpine areas
- Large scale movements through unsuitable habitat (i.e., forest) have been noted

Occurrence in East Kootenay

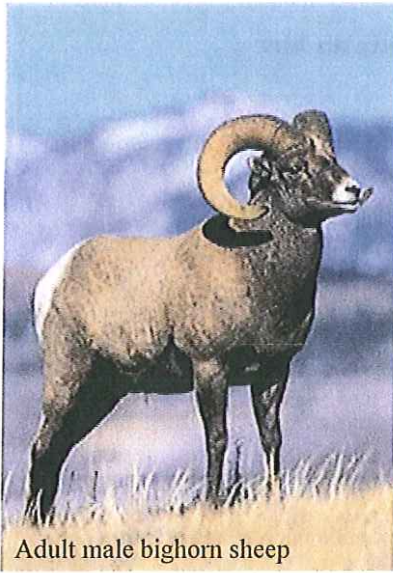
- Occurs primarily in the Rocky Mountain Trench north to Spillimacheen and in the Elk Valley south of Elkford; most common in the Rocky Mountain Trench south of Wasa
- Known den locations in Tembec's operating area in TFM; high quality areas are WHAs.

Status in B.C. and Canada

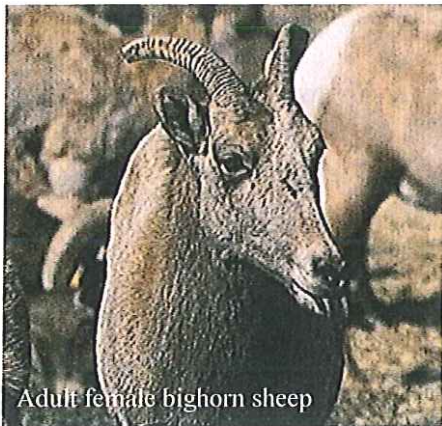
- Red-listed (Threatened or Endangered) and Identified Wildlife (V. II) in B.C.
- COSEWIC lists the B.C. sub-species as Endangered in Canada

Any sightings of a badger, especially one with kits, or badger dens within Tembec's operating area should be reported to the Tembec Forest Scientist. Take the GPS location of badger dens within cutblocks. Consult the Badger Strategy in the SFMP and Tembec's Forest Scientist regarding site plans for areas where badger dens occur.

Rocky Mountain Bighorn Sheep (*Ovis canadensis canadensis*)



Adult male bighorn sheep



Adult female bighorn sheep

Description

- A stocky sheep with light to dark brown colouration, white rump patch and end of muzzle, and small black tail
- Male has massive horns that grow in a spiral; female has thin horns that curve up and back from the head

Similar species

- Female bighorn sheep are sometimes confused with mountain goats, but mountain goats have a dull white coat with shiny black horns

Habits

- Primarily a grazer (grasses, forbes, and sedges), but will eat browse species such as willow and Douglas maple in spring
- Rut begins in early November, young are born in May and June
- Shows seasonal elevational migrations from high summer habitat to lower wintering ranges, herds have high fidelity to home ranges

Habitat

- Summer ranges consist of high elevation alpine and sub-alpine areas; winter ranges are low elevation grasslands and open Ponderosa pine and Douglas-fir forests
- High quality habitat consists of rocky escape terrain juxtaposed with good forage
- Some herds use high elevation habitats for both summer and winter ranges
- Mineral licks are critical habitat features, animals will make long distance movements to use these licks

Occurrence in East Kootenay

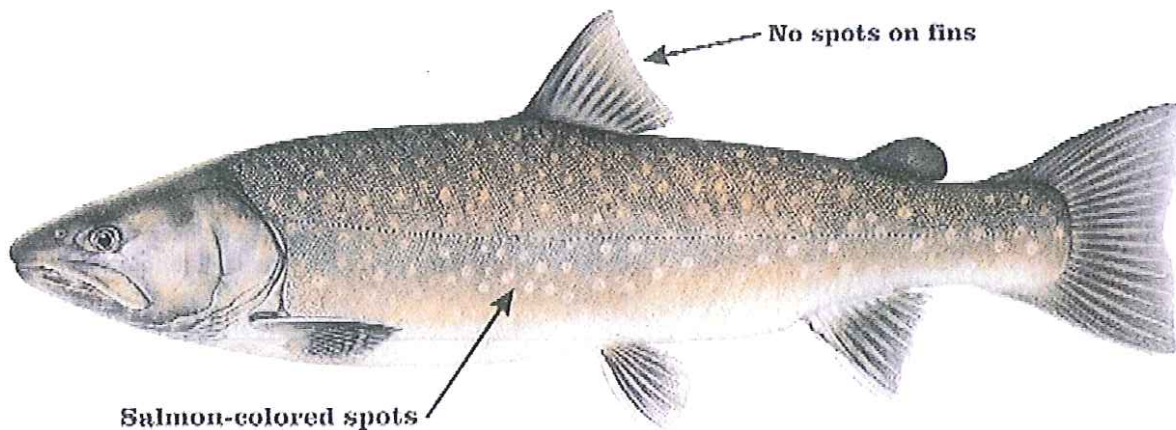
- The East Kootenay has some of the highest sheep densities in B.C.
- Bighorn sheep sub-populations occur east of the Kootenay/Columbia Rivers
- Bighorn sheep winter range is mapped as Ungulate Winter Range

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife Species (V. II) in B.C.

Consult the Ungulate Winter Range maps and guidelines, the Ungulate Strategy within Tembec's SFMP and Tembec's Forest Scientist regarding site plans for areas overlapping Bighorn sheep habitat.

Bull Trout (*Salvelinus confluentus*)



Description

- A medium-sized member of the char family, growing to about 4 pounds in river and stream systems
- Has salmon coloured spots on an olive-green to dark brown background, the belly is white except during spawning when it is red

Similar species

- Dolly Varden are smaller than bull trout on average, and have a relatively shorter and narrower head. They occur mainly in coastal areas

Habits

- Spawning occurs in the fall, bull trout eggs hatch in late winter / early spring, and the fry use the streambed for months after hatching
- Small Bull Trout eat insects, then switch to eating other fish as they grow larger
- Some fish stay in the river / stream reaches they were born in, while other migrate to larger rivers and lakes

Typical habitat

- Non-breeding: a variety of habitats from lakes, to large and small rivers and streams
- Breeding: streams of gentle gradient, clear, cold water of adequate flow, unsedimented stream beds of cobbles and gravel
- Instream and overstream cover elements are critical, as are water temperatures less than 15° C

Occurrence in East Kootenay

- Species occurs in most major river systems and tributaries where suitable habitat exists. Key over-wintering sites include the St. Mary's, Elk, and Kootenay Rivers; highest density of redds found in Wigwam River
- Known major spawning areas are HCVF (High Conservation Value Forest) areas

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife (V. II) in B.C.
- COSEWIC does not list this species

Inform Tembec's Forest Scientist of any newly discovered spawning areas (concentrations of redds). Consult Tembec's Integrated Riparian Strategy and the Bull Trout Strategy in the SFMP regarding site plans for areas adjacent to Bull Trout habitat. Check the HCVF management strategy for known spawning areas.

Woodland caribou, mountain ecotype (*Rangifer tarandus caribou*)



Description

- A medium sized (90-110 kg) ungulate with a dark brown coat, white neck collar, and dark face. The underside of the tail and hoof edges are also white
- Both sexes have antlers, though the males are larger and more elaborate. Males also have a white ruff under the neck
- Hooves are large for flotation in the snow, with tracks appearing in the shape of a pair of round brackets; dew claws often show



Habits

- Feed primarily on arboreal lichens, although spring and summer forage includes many different forbes
- Generally undergo seasonal elevational migrations, the extent varying by herd
- Pregnant cows return to isolated, higher elevations in early summer to calve

Typical habitat

- Habitats used may vary by herd, but usually include high elevation alpine areas, alpine parkland and open forest, and older spruce / subalpine fir and cedar / hemlock forest

Occurrence in East Kootenay

- The South Purcell herd occupies higher elevation areas in the Purcells from Buhl Creek to Kootenay Lake
- Caribou habitat is legally mapped and is also HCVF.

Status in B.C. and Canada

- Mountain Caribou are Red-listed (Endangered or Threatened) and Identified Wildlife (V. II) in British Columbia
- COSEWIC lists the Mountain Caribou of the southern B.C. mountains as a Threatened population

Any sightings of Mountain Caribou should be reported to Tembec's Forest Scientist. Mountain Caribou habitat is legally mapped with logging and road-building prohibitions. Consult Tembec's Forest Scientist and the UWR GAR order for caribou for any harvesting proposals within caribou habitat.

Coeur d'Alene Salamander (*Plethodon idahoensis*)



Adult Coeur d'Alene salamander

Description

- Small, black salamander with orange dorsal stripe (varies from green to red)
- Yellowish throat patch
- Legs long with short, slightly webbed toes
- Adults can measure up to 12 cm long

Similar species

- None within the area

Habits

- Feeds exclusively on invertebrates (e.g., insects)
- Generally only occurs above ground nocturnally during periods of wet weather, roughly March-May and June-September
- Eggs laid in spring and young hatch in mid-September

Typical habitat

- Main habitat is seeps or wet depressions, riparian zones, and waterfall spray zones, emerges at night
- Can also be found in deep talus on cool, moist, north-facing slopes
- Occurs in all coniferous forest types within the area

Occurrence in East Kootenay

- Coeur d'Alene salamanders have been found in the Moyie and St. Mary's River watersheds in the East Kootenay
- Known locations have WHAs around them

Status in B.C. and Canada

- Yellow Listed (Not at Risk) in B.C. (was previously blue listed)
- COSEWIC lists this species as a Species of Concern in Canada

Any sightings of a Coeur d'Alene salamander should be reported to Tembec's Forest Scientist and Planning Forester. Consult the WHA Measures in the Identified Wildlife Management Strategy and Tembec's Forest Scientist regarding management plans adjacent to sites where these salamanders are known to occur.

Fisher (*Martes pennanti*)



Description

- Long, thin body 60 cm long excluding tail
- Colour generally a rich chocolate brown with grizzling around the face, shoulders and back
- Long (1/3 body length) black, densely furred tail
- Pointed face with small, rounded ears
- Tracks exhibit 5 toes, and average 4 cm wide

Similar species

- American Marten are 2-3 times smaller, often with a white or dull orange patch on the chest
- Wolverine are larger with a stockier body

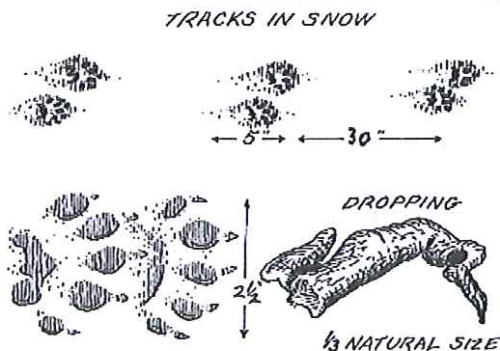


Habits

- Eats a wide variety of prey including rodents, carrion, small birds and squirrels, although in some areas they focus on snowshoe hare and porcupine
- Forages above the snow in the winter
- Summer foraging associated with thick shrub layer and coarse woody debris

Habitat

- Fisher are associated with larger patches of mature and old forest, as well as riparian areas. Maternal dens in large (> 100 cm dbh) cottonwood
- Coarse woody debris and shrub cover are used for both foraging and resting sites



Occurrence in East Kootenay

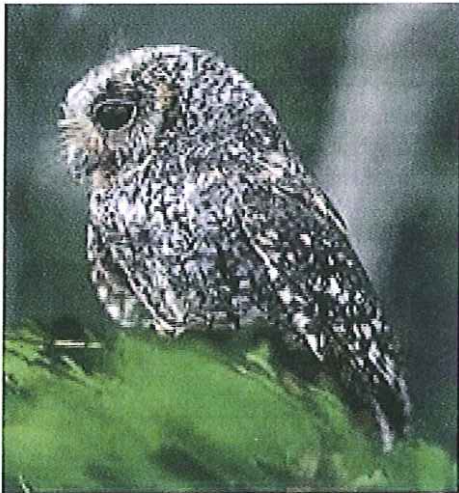
- Largely extirpated in East Kootenay. A recent reintroduction was mostly unsuccessful. Most recent sightings in Lost Dog, Ward, Bloom, and Gold Creeks.

Status in B.C. and Canada

- Fishers are Blue-listed (Species of Special Concern) and an Identified Wildlife Species (V. II) in B.C.
- COSEWIC does not list this species

Any sightings of a Fisher or Fisher tracks should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist for site plans in areas suspected to be current fisher habitat.

Flammulated Owl (*Otus flammeolus*)



Description

- A small (17 cm) owl with indistinct ear tufts, spotted grey, red, and white plumage
- Only small owl with black eyes
- Call is a single or double low, hollow hoots, heard at night

Similar species

- Northern Pygmy Owl is diurnal, has 2 black spots on its nape, a long tail and yellow eyes
- Northern Saw-Whet Owl has pronounced reddish streaks on its belly, yellow eyes, and a white-spotted brown back
- Boreal Owl has a brown streaked belly, white spotted brown back, yellow eyes, and a black bordered facial disk

Habits

- Diet consists mainly of insects, although some small mammals may be taken
- Nests in old woodpecker cavities, often in large snags in relatively dry, open forest. Will use nest boxes if available
- Highly migratory, winters in South America and Mexico
- High fidelity to specific nest sites, often reusing the same nest year after year

Typical habitat

- Nests and forages in dry open forests with snags and small thickets of young trees in the Interior Douglas-fir and Ponderosa Pine zones
- Uses large Py and Fd snags for nesting, and small grassy opening for foraging

Occurrence in East Kootenay

- Inventories in the Rocky Mountain Trench have detected owls from Moyie Creek north to Radium
- Known sites (~15) have WHAs around them
- Nest sites and sites where owls have been detected are in TFM

Status in B.C. and Canada

- This species is Blue-listed (Species of Special Concern) and Identified Wildlife (V. II) in B.C.
- COSEWIC lists this as a species of Special Concern in Canada

Any sightings of a Flammulated Owl or Flammulated Owl nests should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult the WHA measures and Tembec's Forest Scientist for site plans in areas with known or suspected Flammulated Owl nests and/or detections.

Gillette's Checkerspot (*Euphydryas gilletti*)



Ventral (underside)



Dorsal (upperside) surface pattern



Egg masses

Description

- Wingspan 36-45mm
- Upper side of wings black with band of large orange-red spots and smaller white spots; broad orange-red band close to margin of wing is distinct from other closely related species
- Under side is similar to upper side

Similar species

- Variable checkerspot larger and extremely variable in appearance, but black bounded by orange and white spots is characteristic; widespread in western mountains from Mexico to Alaska
- Edith's checkerspot smaller with less black on ventral side; found in SE BC and southern AB

Habits

- Adults emerge in late June through July
- Adults obtain nectar from yellow composite flowers (Asters)
- Female lays eggs when they emerge; these hatch in ~2 weeks; they produce one brood per year
- Larvae usually feed on black twinberry

Typical habitat

- Mesic openings (fens/meadows) and open riparian areas, typically in the ESSF and MS BEC zones
- Abundant shrub cover, dominantly black twinberry (*Lonicera involucrata*)
- Abundant nectar flowers, primarily yellow composite flowers in genera *Aster*, *Senecio* and *Agoseris*.

Occurrence in East Kootenay

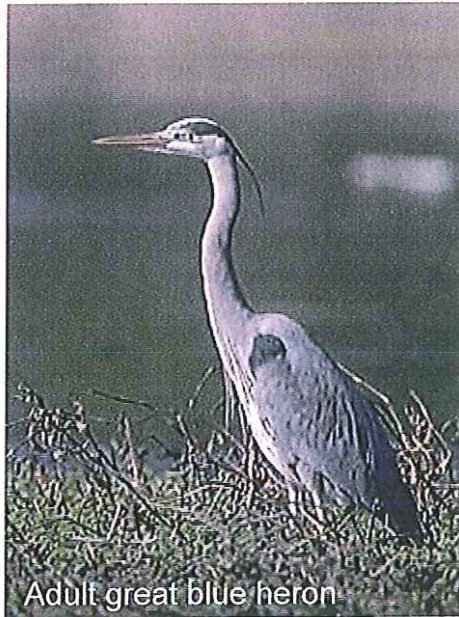
- Known to occur in the Upper Elk wetlands and in suitable habitat in the Flathead drainage.
- Occurrences are proposed WHAs, detections are in TFM

Status in B.C. and Canada

- Red-listed (Threatened or Endangered) and Identified Wildlife (V. II) in B.C.
- COSEWIC has not yet evaluated this species

Any sightings of a Gillette's Checkerspot should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist, the WHA measures in the Identified Wildlife Management strategy, and the Gillette's Checkerspot Strategy in the SFMP regarding site plans for areas where these butterflies occur.

Great Blue Heron (*Ardea herodias*)



Adult great blue heron



Great blue heron



Juvenile great blue

Description

- Large (117 cm) wading heron
- Blue-grey in colour, white cap, black streak above eye continues through to nape plume on adults
- Juvenile has a black crown with no plume

Similar species

- No other herons or shorebirds of this size occur regularly in the area

Habits

- Nests in colonies in stands of large trees adjacent or close to water, constructs large stick nests
- An ambush hunter, eats small fish and amphibians
- Sensitive to human disturbance around their colonies, especially during incubation (mid May – early June)

Habitat

- Hunts along the edge of small lakes and wetlands
- Uses older forested areas adjacent or near wetlands as breeding sites

Occurrence in East Kootenay

- Breeding colonies are limited in number and most locations are known (in TFM)

Consult the WHA measures for Great Blue Heron in the Identified Wildlife Management Strategy and Tembec's Forest Scientist regarding site plans for areas near Great Blue Heron nesting colonies.

Grizzly Bear (*Ursus arctos*)



Adult grizzly

Description

- Large (110-550 kg) bear with prominent shoulder hump, colour variable from blond to chocolate brown, fur often with white tips
- Concave face profile, ears small and rounded, claws long and curved

Similar species

- Black Bears lack a shoulder hump, have a straight face profile, large ears, and short claws



Grizzly front tra

Habits

- Eats predominantly vegetation such as succulent plants, tubers, and berries. Will, however, readily eat carrion and prey on ungulate calves
- Hibernates during the winter, usually from November to April or May
- Den sites are usually on north-facing slopes beneath tree roots or in caves
- Wide ranging in the course of a single year, will use several habitat types in different seasons
- Aggressively defends young and food sources such as carrion

Typical habitat

- Most often forages in open areas within a forested environment
- Avalanche paths and riparian habitat are important spring / early summer habitat; late summer and fall use concentrates on areas of high berry plant density (usually *Vaccinium spp.*) and alpine areas where marmots and ground squirrels are abundant

Occurrence in East Kootenay

- Occupies suitable habitat throughout the region
- Remote drainages in the Rockies and Purcells are important habitat; high value habitat areas have been identified as High Conservation Value Forests and have specific management strategies.

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife (V. II) in B.C.
- COSEWIC lists Grizzly Bear as a Species of Special Concern in Canada

Consult the HCVF management guidelines, Tembec's Grizzly Strategy in the SFMP and Tembec's Forest Scientist regarding site plans in high value grizzly bear habitat.

Lewis' Woodpecker (*Melanerpes lewis*)



Description

- Greenish-black head and back with dark red face, white throat and collar, pink belly
- Medium-sized (27 cm) woodpecker with slow, steady wingbeats similar to a Crow

Similar species

- Red-naped Sapsucker has a red throat and nape
- Hairy, Downy, Three-toed and Black-backed Woodpeckers all have some combination of mottled white and black
- Pileated Woodpecker is much larger (42 cm)
- Northern Flicker has a brown back with black barring and spotted belly

Habits

- Gleans for insects on trees, will also catch flies on the wing from a perch, also eats fruit and nuts
- Cavities are freshly excavated in large trees or previous cavities reused
- Often occurs in groups

Typical habitat

- Primary nesting and foraging habitat is low and mid elevation, young forest burns, dry open Ponderosa Pine forest, and riparian woodlands (mainly Interior Douglas-fir and Ponderosa Pine zones)
- Most common nest trees in East Kootenay are Douglas-fir and Ponderosa Pine snags

Occurrence in East Kootenay

- Occurs at low densities in suitable habitat in the Rocky Mountain Trench
- Known nest sites in TFM

Status in B.C. and Canada

- Red-listed (Threatened or Endangered) and Identified Wildlife (V. II) in B.C.
- COSEWIC Species of Special Concern in Canada

Any sightings of a Lewis' Woodpecker or Lewis' Woodpecker nest trees should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist and the WHA measures in the Identified Wildlife Management strategy regarding site plans for areas with active Lewis' Woodpecker nest sites.

Long-billed Curlew (*Numenius americanus*)

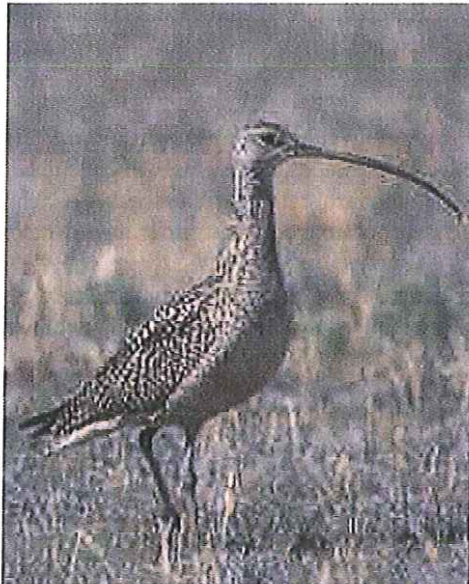


Description

- A large shorebird (60 cm high) with a reddy-brown back with white mottling and tan belly
- Reddy-brown wing lining distinctive in flight
- Long (~15 cm long), downcurved bill
- Call a distinctive *cur-lee*

Similar species

- Most other shorebirds in the area are smaller in height with shorter bills
- The Common Snipe is stocky with a short, straight bill; in flight, feathers make a low whistling sound



Habits

- Eats a wide variety of insects as well as earthworms
- Lays eggs (usually 4) in the period from mid-April to mid-May
- Nest a small hollow on the ground in a grassy area, often lined with grass, animal fur, leaves or twigs
- Chicks hatch in the middle to end of June, remain close to the nest for first few days
- Will reuse nest sites and/or nesting territories from year to year

Habitat

- Nest and forage in open, low grasslands where sparse shrubs and flat terrain afford good visibility
- Patches of grassland should be 500 m in width at narrowest point for breeding
- Nesting territories range from 20 –30 ha.

Occurrence in East Kootenay

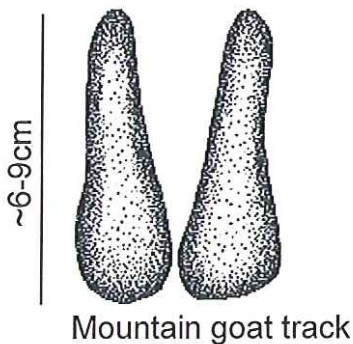
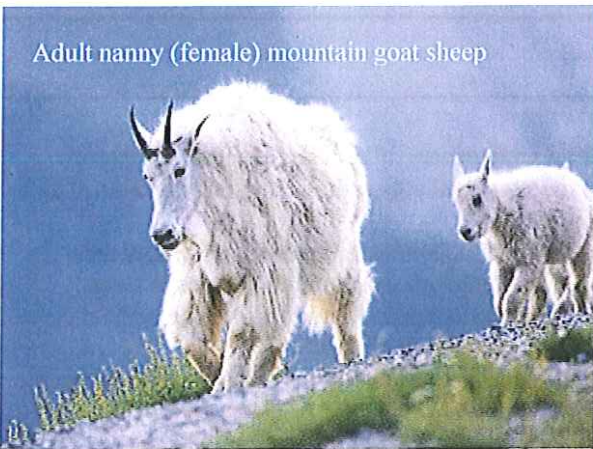
- Known breeding sites include Skookumchuk Prairie, St. Mary's Reserve, Baynes Lake and Windemere area.

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife (V. II) in B.C.
- COSEWIC Species of Special Concern in Canada

Any sightings of a Long-billed Curlew should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult the WHA measures in the Identified Wildlife Management Strategy and Tembec's Forest Scientist regarding site plans for areas where Long-billed Curlews are known to breed.

Mountain Goat (*Oreamnos americanus*)



Description

- A stocky short legged animal with a white coat, and a double beard of long hair below the chin
- Female and males similar, but male horn diameter is wider than the eyes and curves further back past the ears

Similar species

- Female bighorn sheep are sometimes confused with mountain goats, but female sheep are browner in colour and their horns are brown not black.
- Tracks of sheep are similar to mountain goats

Habits

- Eats a variety of forage, primarily grasses, but also forbs and browse
- Males and females spatially separated, except during rut
- Rut begins in late October and goes until early December, young are born mid-May to early June

Habitat

- Alpine and sub-alpine areas close to cliffs or rocky ledges; especially windswept ridges
- Females rarely forage below tree line. Males will often forage in coniferous forests below the tree line
- Mineral licks are critical habitat features; animals will make long distance movements to use these licks.

Occurrence in East Kootenay

- Widespread through the East Kootenay's

Status in B.C. and Canada

- Yellow listed (Not at risk) and Identified Wildlife Species (V. II) in B.C.
- COSEWIC does not list this species.
- BC has the majority of the world's population of mountain goats and thus high responsibility for them

Report any findings of goat trails or licks to Tembec's Planning Forester and Forest Scientist. Consult the Ungulate Winter Range maps and guidelines, the Mountain Goat Strategy within Tembec's SFMP and Tembec's Forest Scientist regarding site plans for areas overlapping goat habitat or containing goat licks and trails.

Northern Goshawk (*Accipiter gentilis atricapilus*)



Adult Northern



Juvenile Northern

Description

- Medium-sized (53-66 cm tall) forest raptor
- Slate grey back, white eyebrow line, white belly and throat with fine black horizontal lines, wings broad and blunt, tail long and wedge-shaped at end
- Call a repetitive, loud and aggressive *ki-ki-ki-ki-ki*
- Juvenile plumage is brown on the back, and mottled white and brown on the belly and throat. Often use a begging call sounding like a raspy screech

Similar species

- Cooper's Hawks lack the white eyebrow and have rusty horizontal barring on the belly and throat
- Sharp-shinned Hawks are much smaller and also have rusty horizontal barring on the belly and throat

Habits

- Generally flies sub-canopy, infrequently soars over the canopy
- Hunts from perches in trees where it takes red squirrel, snowshoe hare, grouse, and medium-sized birds such as robins and grey jays
- Prey often consumed on a plucking perch such as a large piece of coarse-woody debris or moss covered boulder
- Builds large (70-130 cm in diameter) stick nests in mature and veteran trees, most commonly Douglas-fir and Larch, often on the first main branches
- Passive during incubation period in late April / May, aggressively defends nest after young hatch in early June

Typical habitat

- Mature or old-growth forest with open understory and high canopy closure. Will nest in younger stands with suitable nest trees (Lw or Fd veterans)

Occurrence in East Kootenay

- Occurs where suitable habitat is available
- Under long-term study by Tembec
- All known nest sites in TFM

Status in B.C. and Canada

- Yellow-listed in B.C. (Species not at Risk)
- COSEWIC only classifies the *A.g.laingi* subspecies (Queen Charlotte Islands) as Threatened

Any sightings of a Northern Goshawk or possible Goshawk nest should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult the Goshawk Strategy in the SFMP and Tembec's Forest Scientist regarding site plans for areas adjacent to northern goshawk nest sites (active or inactive).

Northern Long-eared Myotis (*Myotis septentrionalis*)



Description

- Medium-sized (8.7 cm) bat
- Dark fur on back, paler fur on belly, ear and flight membranes are dark brown
- Ear extends beyond the nose when pushed forward, edge of tail membrane is bare or with a few scattered hairs

Similar species

- Several, need a diagnostic key for reliable and accurate field identification

Habits

- Not well studied
- Feeds on a diversity of insects, which it generally pursues less than 3 m above the ground above the forest understory
- In eastern Canada, found roosting in caves and behind loose bark of trees
- Will drink on the wing from small pools in forest clearings
- Shows fidelity to roosting within the same stand

Habitat

- Not well studied
- Seems to prefer mature stands of deciduous trees which provide roosting sites in cavities, tree cracks, and behind loose bark
- Snags are likely an important habitat element for this species

Occurrence in East Kootenay

- Inventory information lacking, likely occurs where suitable habitat exists

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) in B.C.
- COSEWIC does not list this species

Any sightings of a Northern Long-eared Myotis or Northern Long-eared Myotis roosting sites should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist regarding site plans for areas suspected to contain Northern Long-eared Myotis roosting sites

Olive-sided Flycatcher (*Contopus cooperi*)



Description

- Medium-sized (18-20 cm) songbird
- Deep brownish to olive-grey above and on sides/flanks, white on throat/breast/belly

Similar species

- Western wood-pewee; is smaller with more prominent wing bars and dirty white underbelly

Habits

- Very conspicuous often perching on tall trees/snags while foraging and singing "quick, THREE BEERS!"
- Sit and wait predator foraging on insects
- Usually solitary

Typical habitat

- Open areas containing tall trees or snags for perching in coniferous or mixed coniferous forests (burns, wetlands, cutblocks), usually near water
- Builds a small cup nest composed of twigs, grass, weeds with a lining in coniferous trees, usually away from the trunk of the tree

Occurrence in East Kootenay

- Has been recorded in most forested areas of BC

Status in B.C. and Canada

- Blue-listed (Species of Special Concern)
- COSEWIC lists this species as Threatened in Canada

Report any sightings of an Olive-sided flycatcher to Tembec's Forest Scientist. Consult the Forest Scientist and Tembec's Integrated Riparian Strategy regarding site plans for areas containing known Olive-sided flycatcher habitat.

Painted Turtle (*Chrysemys picta*) –Rocky Mountain Population



Description

- Shell roughly 25 cm long, ranges in colour from black to brown to olive
- Underside bright reddish-orange with large black blotch running down the centre
- Back feet webbed
- Yellow lines on head and tail

Similar Species

- Western pond turtle has more raised ridges along plate joints on the back; its underside is yellowish with black markings

Occurrence in East Kootenay

- Occurs wherever suitable habitat exists (e.g., forested wetlands, low gradient creeks, temporary ponds), typically in the trench bottom

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) in B.C.
- COSEWIC lists this species as Special Concern



Habits

- Omnivorous, eats a variety of aquatic vegetation and small prey such as frogs and fish
- On warm sunny days will bask on rocks and logs

Habitat

- Mostly aquatic, found in lakes, ponds and streams with slow moving water, muddy bottoms and dense aquatic vegetation in the trench
- Will make overland movements, lays eggs in excavated holes on warm, south facing slopes in June
- Buries itself in the muddy bottom of ponds or streams during hibernation

Any sightings of a Painted turtle should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Integrated Riparian Strategy and Tembec's Forest Scientist regarding site plans for areas adjacent to identified Painted turtle habitat

Pileated Woodpecker (*Dryocopus pileatus*)



Description

- Large (42 cm) woodpecker
- Black wings, back, and belly, faint white barring on flanks, red cap, white throat and cheeks (looks like 'Woody Woodpecker')
- Deep, crow-like wingbeats
- Call is a loud *wuck*, singularly or in sequence

Similar species

- No other woodpecker is as large
- Only woodpecker with an almost completely black body and large, red cap

Habits

- Excavates large, oval cavities in large diameter trees, often live aspen trees
- Excavates large rectangular holes in stumps and at the base of trees and stumps while foraging for ants

Typical habitat

- Nest trees typically aspen > 30 cm dbh but will use large conifer snags as well
- Prefers mature to old-growth forests with large trees and high canopy closure
- Roost and nest sites are often found near wet areas

Occurrence in East Kootenay

- Occurs wherever suitable foraging and nesting habitat is available

Status in B.C. and Canada

- Pileated Woodpecker is Yellow-listed (Not at Risk) in B.C.
- COSEWIC does not list this species
- Excavates cavities used by many other birds and mammals.

Any Pileated Woodpecker nests should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist regarding site plans for areas containing active Pileated Woodpecker nests.

Rubber Boa (*Charina bottae*)



Adult Rubber

Description

- A thick bodied snake with little taper in body diameter from head to tail
- Brown to yellowish or greenish brown on the back and yellow on the belly, shinny appearance
- Adults range from 35-83 cm long

Similar Species

- None of the other snake species in the area have a uniform taper body plan or shinny appearance

Habits

- Generally active around dawn and dusk from March to November, depending on local weather conditions
- Preys on variety of items including mice, shrews, lizards, snakes, and small birds
- Difficult to detect as it generally remains hidden under woody debris or forest floor litter
- When alarmed, may roll into a ball with head in the centre and tail exposed

Habitat

- Primarily occurs in humid mountainous regions, sometimes in drier areas
- Burrows in soil, hides under fallen logs and rocks, often in riparian areas

Occurrence in East Kootenay

- Not well known, but thought to occur throughout the area
- Known sites at Radium Hot Springs, Lazy Lake, Kimberley Nature Park, and Eiger Hills

Status in B.C. and Canada

- Yellow-listed (Not at Risk) in B.C.
- COSEWIC lists the Rubber Boa as a Species of Special Concern in Canada

Any sightings of a Rubber boa should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist regarding site plans for areas where these snakes are known to occur.

Sharp-tailed Grouse (*Tympanuchus phasianellus columbianus*)



Description

- Back heavily barred with dark brown and cinnamon, belly white with brown spotting
- Yellow comb over the eye, males inflate purple neck sacs during courtship
- Courting call is a low coo-oo

Similar species

- The other 3 grouse species in the area have broad tails and dark or heavily barred breasts
- White-tailed ptarmigan only occur at high elevation



Habits

- Eat mainly grasses, succulent forbes, insects and berries
- During winter, eat buds of deciduous shrubs and trees
- In spring, males congregate in traditional areas (leks) and display for females which come to choose a mate
- Lekking sites may be used annually, females are sensitive to disturbance at leks
- Most nests are within 1.6 km of the lekking site

Habitat

- Use open grasslands with scattered low shrubs; open habitat is critical for leks for predator detection
- During winter, move to riparian area with abundant deciduous shrubs and trees

Occurrence in East Kootenay

- Thought to be extirpated. Was abundant in tall grasslands south of Skookumchuck until 1960s, now only occasional sightings near the US border are found.

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife (V. II) in B.C.
- COSEWIC does not list this species

Any observations of a Sharp-tailed grouse should be reported to the Tembec Planning Forester and Tembec Forest Scientist.

Rocky Mountain Tailed Frog (*Ascaphus montanus*)



Description

- A small (2-5 cm) frog that varies in colour from light or dark brown to olive green
- Males have a 'tail', which is used to inseminate females
- Tadpoles are light grey to black (often with fine white speckling), have a disc-shaped mouth and can grow up to 6.5 cm in length before they metamorphose

Similar species

- Spotted frog has black spots with light centres scattered over its back, and a light tan strip reaching from the upper jaw to the shoulder
- Northern leopard frog is larger (5-8 cm) and has large, black spots with a white border on the back and legs
- Wood frog has a distinct black face mask

Habits

- Tailed frogs forage nocturnally, and prey largely on terrestrial insects and some aquatic insects
- Majority of foraging and movement activity takes place within 20 m of suitable stream habitat
- Adults gather in upper reaches of breeding streams in the fall to mate, females lay eggs under rocks in stream after spring runoff, tadpoles hatch in the fall

Habitat

- Tailed frogs require cold (above 20°C is lethal), fast flowing, silt-free streams with a large cobble or gravel substrate that remain ice-free in the winter
- Undisturbed forest on either side of the stream is critical for bank stabilization to prevent siltation, canopy closure to stabilize instream temperatures and for maintaining a stable streamside microclimate

Occurrence in East Kootenay

- Flathead watershed, in the upper reaches of Cabin and Couldrey Creeks, and the Yahk River watershed (including small populations in Boyd and Screw Creeks).
- Known areas are mapped and designated WHAs and HCVF.

Status in B.C. and Canada

- Red-listed (Threatened or Endangered) and Identified Wildlife (V. II) in B.C.
- COSEWIC lists this species as Endangered in Canada

Any sightings of a Rocky Mountain Tailed Frog should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult the measures in the Identified Wildlife Management Strategy, the Tailed Frog Strategy in the SFMP, HCVF guidelines for Tailed Frog areas, and Tembec's Forest Scientist regarding site plans for areas adjacent to known Tailed Frog streams.

Townsend's Big-eared Bat (*Corynorhinus townsendii*)



Adult Townsend's Big-eared bat

Description

- A medium sized bat about 10 cm long
- Large ears about half of the length of the body, large glandular bumps on the nose
- Fur on back ranges from light brown to blackish-grey, fur on the belly is paler

Similar species

- Spotted bat also has large ears, but has jet black fur with large white spots and no glandular swellings on the nose
- Pallid bat also has large ears but is larger (11.5 cm long) and has no glandular swellings on the nose



Adult Townsend's Big-eared bat

Habits

- Emerges roughly an hour after dark
- Forages mostly for small insects such as moths and beetles
- Hibernates from middle of September to middle of May
- Very sensitive to disturbance in daytime roosts and maternal colonies

Habitat

- Occupies dry forests (IDF and PP), usually at low elevation
- Uses caves, old mines, and abandoned buildings as day roosts and maternal colony sites, potentially uses large snags
- In August, migrates to hibernation sites, generally in caves and mines with stable and cool air temperatures

Occurrence in East Kootenay

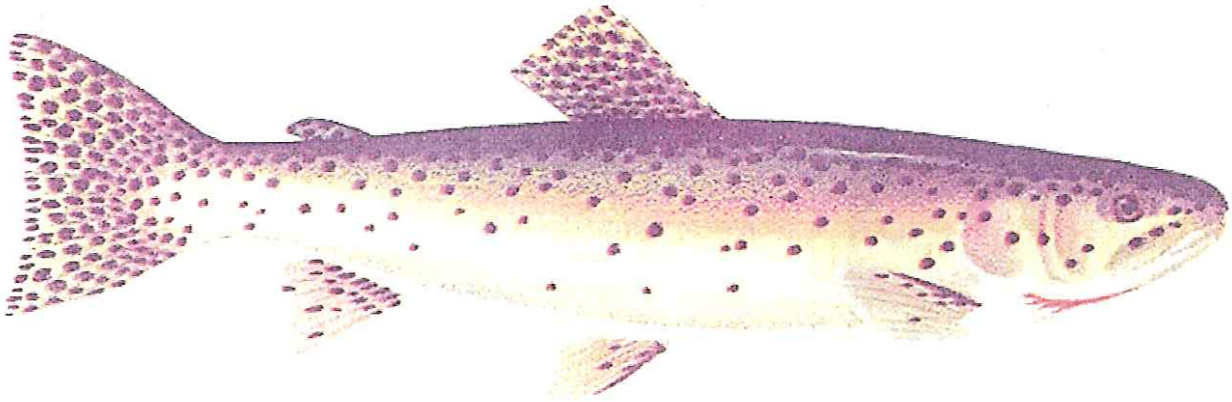
- Only confirmed maternity roost is in a building on the St. Mary's Reserve

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) in B.C.
- COSEWIC does not list this species

Any sightings of a Townsend's Big-eared bat should be reported to the Tembec Planning Forester and Tembec Forest Scientist. Consult Tembec's Forest Scientist regarding site plans for areas suspected to contain bat roosts.

Westslope Cutthroat Trout (*Oncorhynchus clarki lewisii*)



Description

- Medium-sized (14-18 cm) trout
- Greenish back, yellow or silver sides, dark grey or black spots on sides (mostly above lateral line) and fins, dorsal fin square across top, slash of red or orange across lower jaw

Similar species

- Rainbow Trout have pinkish streaks on their sides, and heavy spotting both above and below their lateral line

Habits

- Cutthroat spawn in March – July depending on their elevation, preferred water temperature is around 10° C
- Some populations breed and live in the same stream, others breed in stream then migrate to large lakes
- Diet consists mainly of aquatic and terrestrial insects, zooplankton, and some small fish

Typical habitat

- Varies – small mountain streams, rivers and large lakes
- Needs cool and well oxygenated water, prefers streams with pools, low velocity areas and overstream cover
- Spawn in streams with clean gravel substrate and low velocity

Occurrence in East Kootenay

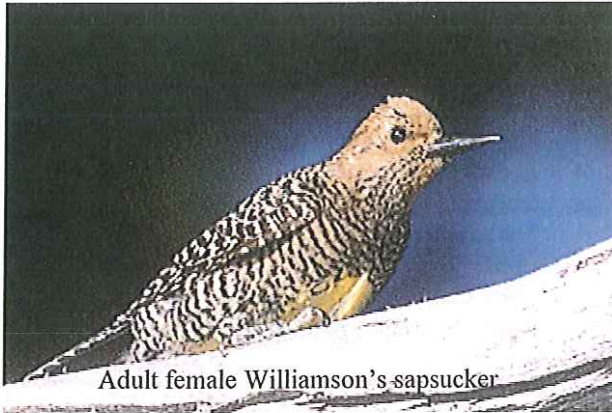
- Populations occur throughout the area, including Flathead watershed and Skookumchuck Creek
- Genetically pure populations are found in Sandown Creek
- Known spawning areas identified as HCVF

Status in B.C. and Canada

- Blue-listed (Species of Special Concern) and Identified Wildlife (V.II) in B.C.
- COSEWIC lists this species as Special Concern in Canada.

Consult Tembec's Integrated Riparian Strategy and the Westslope Cutthroat Strategy in Tembec's SFMP for site plans in areas adjacent to identified Cutthroat Trout habitat, and the HCVF management strategies for areas adjacent to known spawning habitat.

Williamson's Sapsucker (*Sphyrapicus thyroideus*)



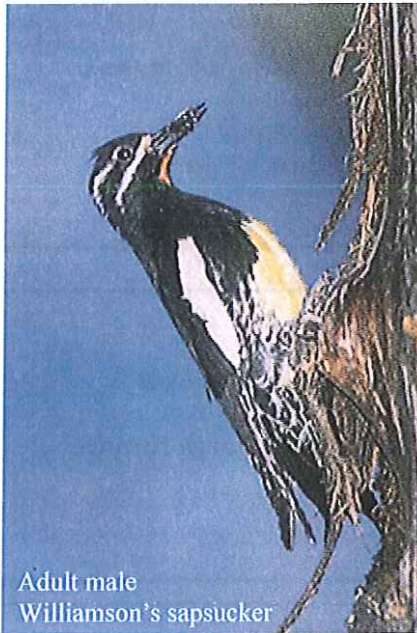
Adult female Williamson's sapsucker

Description

- Medium-sized (23 cm tall) woodpecker
- Male has black head, back, and breast with a yellow belly and red throat
- Female has brown head and brown back, sides and breast barred with white and dark brown. Belly is yellow

Similar species

- This is the only woodpecker species in the area that has a yellow belly and a totally black head with white streaking
- Female could be confused with female Flicker



Adult male
Williamson's sapsucker

Habits

- Feeds on conifer sap by drilling concentric rows of holes in tree trunks; will also feed on ants during the breeding season
- Excavate nest cavities, usually in conifers but sometimes in deciduous trees. May reuse nest trees from year to year
- Occurs in breeding areas from April to September
- Can locate nest trees by listening for loud, plaintive mews from begging juveniles

Habitat

- In the East Kootenay typically uses open stands of mixed conifer (Lw, Fd, Py) and aspen stands
- Nests in large Lw or At, often on stand edges or in openings

Occurrence in East Kootenay

- Known nest sites occur from Kimberly to the US border; locations in TFM; major nest areas are proposed as WHAs

Status in B.C. and Canada

- Red-listed (Endangered or Threatened) and Identified Wildlife (V. II) in B.C.
- COSEWIC lists this species as Endangered

Any sightings of a Williamson's sapsucker or Williamson's sapsucker nest should be reported to the Tembec Regional Forester and Tembec Forest Scientist. Consult the WHA measures in the Identified Wildlife Management Strategy, the WISA strategy in Tembec's SFMP and Tembec's Forest Scientist regarding site plans for areas containing Williamson's sapsucker nests.

Rare Red and Blue-listed species in Tembec's B.C. Operating Area



Mottled sculpin

- Small spines along outer margin of gill covers, large pectoral fins, eyes on top of head
- Approx. 16 cm long
- Occurs in the Flathead watershed (including Flathead River, Commerce Creek, Cabin Creek, Howell Creek, Burnham Creek, Sage Creek and Kishinena Creek)
- Needs slow currents and rocky bottoms



Northern leopard frog

- Large frog with distinctive dark spots on light green back; spots surrounded by a pale halo
- Majority of population in wetlands near Creston
- 1500 were transplanted to Bummer's Flats in 2003



Chiselmouth

- Hardplate on lower jaw, uniform silvery colour
- Approx. 30 cm long
- No confirmed locations in region, although extensive surveys have not taken place



Least chipmunk, *selkirki* subspecies

- Range restricted to high elevation (Alpine Tundra) habitats in several drainages in the Purcell Mountains west of Invermere
- Three brown strips with white in between running from nose to ear through eye
- Generally inhabits rocky areas such as talus slopes

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Northern pocket gopher, *segregatus* subspecies

- Darkish brown on back and lighter on belly; large upper incisors and front claws for digging
- Weighs about 0.11 kg
- Restricted to an area of 10 km² north of Creston
- Occurs mainly in agricultural areas and along stream banks with loose soil for burrowing



Southern red-backed vole

- Distinctive reddish band running along back, large ears
- Approx. 7 cm long excluding tail
- Occurs in moist forest sites with abundant forest floor structure for foraging and cover
- Occurs in Sage and Kishenina drainages in the Flathead



Red-tailed chipmunk, *ruficaudus* subspecies

- Occurs in the Rocky Mountains from Middle Kootenay Pass south to the border
- Habitat is sub-alpine areas in the ESSF between 1700 and 1900 m
- Habitat includes complex rocky areas and areas with abundant CWD
- Tawny above with grey rump, tail dark reddish on underside



Peregrine falcon

- Pointed wings and long, thin tail; black cap and 'moustache'
- Approx. 38 cm tall
- Occurs infrequently in the Columbia Valley and side valleys
- Suspected to occasionally breed in the East Kootenay, but no confirmed locations

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Prairie falcon

- Pale face and throat with dark 'moustache' mark; whiteish underparts with dark streaks on breast
- Approx. 41 cm tall
- Rare in East Kootenays, suspected to breed occasionally in suitable habitat
- Nests on cliffs in treeless habitats (varying from rangeland to alpine meadows)



Swainson's hawk

- Broad wing and tail, wings tapering noticeably at ends, dark 'bib' above paler chest
- Approx. 46 cm tall
- Recent surveys concluded Swainson's hawks very rare in East Kootenays
- Breed in small woodlands adjacent to rangeland



Western screech owl

- Large, rounded head with prominent ear tufts; dense streaking on underparts
- Approx. 20 cm tall
- Nests in natural cavities and nest boxes
- Generally nests in riparian deciduous forest
- Known nest areas in TFM



Burrowing owl

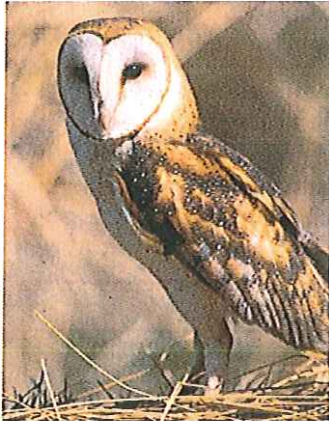
- Long-legged, ground dwelling owl; white spotting on wings, back, and head
- Approx. 20 cm tall
- Nests in open grassy areas with small shrubs
- Only 3 records for the East Kootenay, from Wycliffe area

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Short-eared owl

- Upperparts mottled brown and white, face dark and unpatterned, pale underwings with black 'wrist marks' in flight
- Approx. 33 cm tall
- Uses open areas such as grasslands, meadows, and agricultural areas
- Has been sighted occasionally in the Rocky Mountain Trench, suspected to breed at low densities in East Kootenay



Barn owl

- Tawny and grey upperparts with small black dots, pale facial disc and breast
- Approx. 36 cm tall
- Only two confirmed sighting of Barn owls in the East Kootenay
- Uses man-made structures for nesting, forages in agricultural lands



Yellow-breasted chat

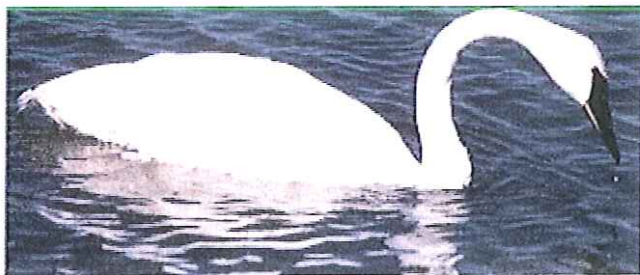
- Yellow throat and breast, olive upperparts, thick bill, white 'spectacles'
- Approx. 15 cm tall
- Preferred habitat is shrub thickets, occurs mainly in the Okanagan



Bobolink

- Black head, underparts, back and wings; yellow nape
- Approx. 15 cm tall
- Use riparian meadows or agricultural fields for nesting.
- All known nesting sites in the East Kootenay are in agricultural fields.

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Trumpeter swan

- Entirely white, bill has *no* yellow spot
- Approx. 114 cm long
- Use Columbia Valley wetland areas during spring or fall migration



Surf scoter

- Entirely black plumage, white patches on nape and forehead; white bill with a red tip
- Approx. 35 cm long
- Occasionally use lakes in the Columbia Valley wetlands and in the trench during migration



American bittern

- Underparts streaked brown and white; black stripe extending from back of mouth down neck
- Approx. 58 cm tall
- Some documented breeding in Columbia Valley wetlands
- Inhabits marshlands with dense stands of emergent vegetation



Sandhill Crane

- Dark bill, red crown, entirely grey plumage
- Approx. 94 cm tall
- Breeds occasionally in large wetlands in the Rocky Mountain Trench (Bummers Flats, Cherry Creek, Columbia Wetlands)

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Western grebe

- Black head, nape, and back; white underparts; feet set far back
- Approx. 46 cm long
- Occurs infrequently on Columbia, Windermere, Wasa, and Moyie Lakes, and lakes in TFL 14 from May to October
- Does not use forested areas at anytime during its life history



American avocet

- Very long, thin, upturned black bill; rusty head, neck, and chest; long, blue-grey legs
- Approx. 38 cm tall
- Occurs sporadically within the East Kootenay during migration
- Nests on shorelines of lakes and sloughs with extensive mudflats for foraging



Forster's tern

- Long, deeply forked tail; orange bill with black tip; orange legs
- Approx. 36 cm long
- Infrequent sightings in the East Kootenay around the Columbia wetlands
- Breeds in marsh habitats



White-throated swift

- White throat extending down central belly to tail; black belly and breast with white spots on flank; strongly notched tail
- Approx. 16 cm long
- Nests on small ledges of rocky cliffs in areas of hot, dry climate
- Only known site in the East Kootenay is near Fairmont Hotsprings – the Dutch Creek Hoodoos

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist



Yellow rail

- Small buffy marsh bird, with white wing patch noticeable during flight
- Approx. 15-19cm tall
- Uses emergent wetlands, grass or sedge marshes, wet meadows
- Sighted once in wetlands near Creston



Barn Swallow

- Distinctive bold plumage with long, slender, deeply forked tail
- Approx. 17 cm tall
- Uses man-made structures for nesting, forages over agricultural lands and water for flying insects



Double-crested cormorant

- Black or dark brown, have orange-yellow patch at base of bill
- In breeding plumage, adults have 2 whitish tufts behind eyes
- Approx. 80 cm tall
- Found only in Creston area
- Use ponds, lakes and slow-moving rivers inland, typically breeding on small islands



Western Skink

- Medium sized lizard with a long bright blue tail
- Juveniles are the most striking
- Will release their tail if grabbed (it will slowly grow back, but never be blue again)
- Maximum length of 20cm
- Found from Kootenay Lake west to Princeton, possibly to Cranbrook
- Use a variety of habitats: bunchgrass-Py-Fd and sometimes in ESSF and ICH ecosystems

Report any sightings of these species to the Tembec Planning Forester and Tembec Forest Scientist