

1.0 Introduction

The following species are proposed for consideration by the Council as Species of Local Importance. Factors that contributed to these recommendations included:

- 1) Is the species considered in decline or at risk State-wide or regionally?
- 2) Is the species particularly sensitive to habitat changes that could be ameliorated with management?
- 3) Is the species known to occur or likely to occur in areas of western Whatcom County under County jurisdiction and subject to private property development or other projects that would be reviewed by the County?

Based on this review two species are proposed:

- Western Spotted Skunk (*Spilogale gracilis*)
- Elk (*Cervus elaphus*)

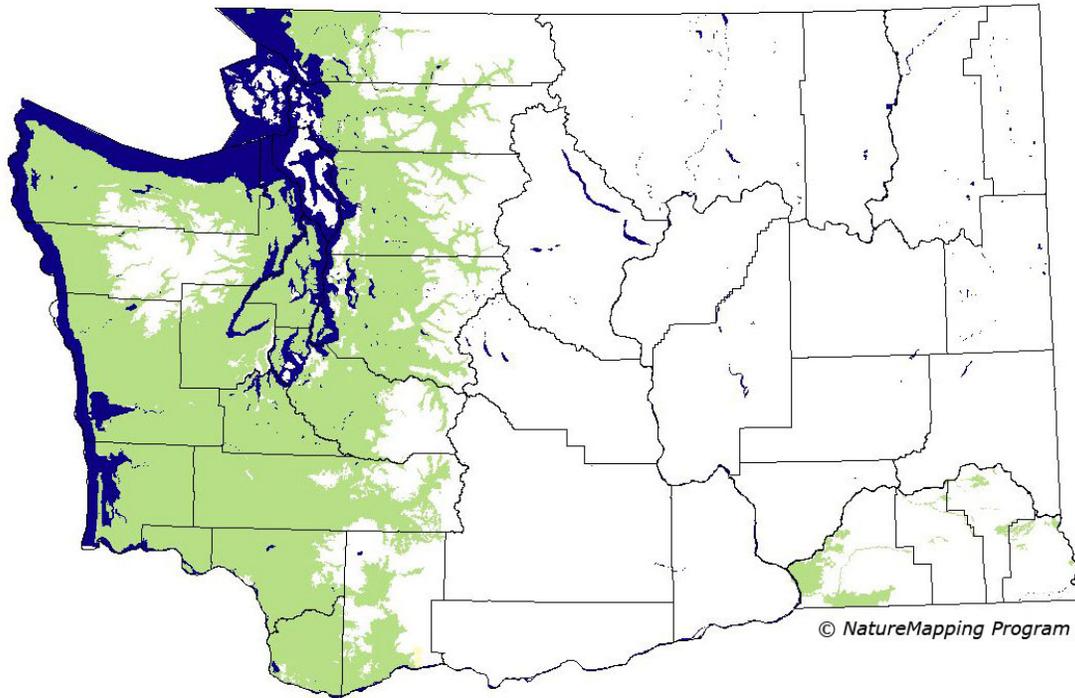
2.0 Proposed Species

2.1 Western Spotted Skunk

- **Biology:** The Western Spotted Skunk is a small to mid-sized member of the skunk family (Mephitidae) and the smallest of the four North American skunks (1 to 4 pounds). This species is active nocturnally. The bulk of the diet is made up of small mammals and insects, but this omnivore will also eat carrion, berries, fruit, birds, bird eggs, reptiles, and amphibians.
- **Habitat requirements:** Western Spotted Skunks are associated with habitats that have dense ground cover, dense understory vegetation, burrows of other species, rocky outcrops, and woody structures (e.g., logs, snags, stumps, log and brush piles). These features are important as resting, denning, and foraging sites and are found in a variety of land cover types including conifer forests, riparian areas, thickets and brushy habitats, and farmlands. Western Spotted Skunks generally occur from sea level to 1,970 feet in elevation in the Olympics and occasionally up to 2,950 feet of elevation in the Cascades. In southeastern Washington, this species uses rocky outcrops, brushy habitats, and riparian areas up to 1,970 feet in elevation.
- **Status:** There is inadequate information on the current status and distribution of this species in much of its range in western and southeastern Washington, including Whatcom County (Figure 1). The population size of this species is unknown and likely declining in the Puget Trough.
- **Threats:** The increased occurrence of opossums and loss and fragmentation of forest habitats due to urban and agricultural development may explain the apparent substantial decline of verified occurrences in the Puget Trough since the 1970s. Great horned owls, bobcats, and domestic dogs and cats are documented predators of Western Spotted Skunks. Anthropogenic causes (i.e., vehicle collisions, trapping, and pest control) may be the prevalent sources of mortality in many populations.

- Protection and Management Recommendations: Basic information on the distribution and abundance of this species and important threats to its continued survival in Whatcom County and elsewhere in the Puget Trough are lacking and needed.

Spotted Skunk *Spilogale gracilis*



Legend:

- = Core Habitat
- = Marginal Habitat

Figure 1. Breeding range map for the Western spotted skunk. The green area shows the predicted habitats for breeding only. The habitats were identified using 1991 satellite imagery, other datasets and experts throughout the state, as part of the Washington Gap Analysis Project.

2.2 Elk

- Habitat Requirements: The North Cascades elk herd is found in portions of Whatcom, Skagit, Snohomish, and King Counties. Most of the elk in this herd are found in the south fork of the Nooksack River on either side of the Skagit-Whatcom County line and the middle Skagit River Valley between Sedro Woolley and Concrete. Historically, WDFW has referred to this as the “core area” because it has the highest elk density. Elk fitted with radio collars have contributed to the current understanding of elk movements in the North Cascades herd area. While not comprehensive, these data revealed that most of the marked elk did not undertake long-distance migrations. Rather, with few exceptions, they tended to maintain relatively small home ranges, which were generally closely associated with river/riparian habitats throughout the year. However, some did show seasonal

migratory patterns, exploiting higher elevation habitats during the snow-free summer months. During the winter, their movements contracted to lower elevations. Their upper limit elevation distribution, about 600 m (2,000 feet), corresponds with the lowest elevation of the snowpack during years with normal winter conditions. In most years, snowpack constricts elk to lower elevation habitats from November through April.

The North Cascades elk herd predominantly occupies forested landscapes. The lower elevation forest- agriculture interface tends to be fragmented elk habitat. It is here that elk groups regularly utilize agricultural and rural residential areas, particularly during the winter months. Most elk observed during annual, early spring population surveys (essentially winter conditions) are below 300 meters (1000 feet). Alternatively, during the summer months, elk venture to higher elevation habitats including creek drainages and headwaters within the Baker River watershed and on the south and west facing slopes of Mount Baker.

- Status: Elk are an important Game species in Washington and considered of high cultural value to the Point Elliott Treaty Tribes (Tribes), with management shared by the Department and the Tribes. Comanagers survey this herd annually to estimate population abundance and key population demographics, including productivity (calves/100 cows) and adult sex (bulls/100 cows) ratios. In 2020, the herd is estimated to be around 1,500 animals with approximately 22 bulls/100 cows and 37 calves/100 cows. All indications are that this herd is increasing, with good calf recruitment.
- Threats: Elk are preyed upon by black bears, cougars, bobcats, coyotes, wolves, and occasionally domestic dogs. Treponeme-associated hoof disease (TAHD) was confirmed in the North Cascades elk herd in 2015, though at a much lower prevalence than elk herds in southwestern Washington where documented cases are highest. It is unknown to what degree TAHD contributes to mortality in this herd.

Human-caused mortality is associated with hunting by State and Tribal hunters, damage permit removals, and elk-vehicle collisions. Elk harvest and damage-related removals are likely conservative, based on routine estimates of population size and herd demographics.

Habitat loss, degradation, and fragmentation are ever-present threats. The core elk area is largely comprised of private industrial forests, which are intensively managed for commercial wood products, and state and federally owned forests. Federally owned forests have been less intensively managed for timber production for many years, with retention of old growth forest and late successional reserves a management objective. Late successional and old growth forests generally provide low quality elk habitat. On private industrial tree farms, heavy restocking of stands and use of herbicides to control understory vegetation soon after timber harvest may drastically reduce the quality and quantity of valuable understory elk forage, as well as the length of time these early seral stage plants are available to elk.

- Protection and Management Recommendations: Protection of forested habitats in Whatcom County is important to the continued success and expansion of this herd.

3.0 Literature Cited

Burke Museum, University of Washington. 2013. Mammals of Washington:

https://www.burkemuseum.org/collections-and-research/biology/mammalogy/mamwash/carnivora.php#Western_Spotted_Skunk.

Accessed 10 Sep 2020.

Washington Department of Fish and Wildlife. 2015. Species of Greatest Conservation Need. Appendix A1 pp. 52-53, In: 2015 State Wildlife Action Plan.

Washington Department of Fish and Wildlife. 2018. North Cascades Elk Herd Plan. Wildlife Program, Washington Department of Fish and Wildlife, Olympia, WA. USA. 35pp.