

I am submitting comments on the Proposed Species of Conservation Concern Draft Evaluations for the American Goshawk of the Tongass National Forest Plan Revision.

I was the Principal Investigator for the long-term interagency goshawk study across Southeast Alaska. I have considerable field, science and policy experience on the Tongass over my career. I worked extensively with Forest Service staff on the development of the Conservation Strategy. I have decades of experience in the study of forest raptors. I remain active as a wildlife professional.

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Queen Charlotte Goshawk (*Astur atricapillus*)

1. First note that you have misspelled the species name in some places.
2. This subspecies designation is based on old accounts and newer genetic information. I suggest you develop those references better. The references used for the subspecies are secondary – not primary references on-point. Using the new genus should reference the American Ornithologists Union designation.
3. Missing references from Grey Pendleton et al., and Steve Lewis diet work. These and other missing references are specific to Southeast Alaska and were funded by the Alaska Department of Fish and Game and the USDA Forest Service.
4. “Readily disperses across landscapes with few habitat-related limitations.” This is quite confusing and not helpful. The document should define dispersal. Natal dispersal? Breeding dispersal? Of course goshawks can fly over various habitats. They are flighted birds. The same could be written for American Robins, Arctic Terns, Ravens, etc. Goshawks in Southeast Alaska do not fly long distances during the nonbreeding season compared with Arctic Terns and neotropical migrants.

Goshawks in Southeast Alaska likely include individuals that maintain a home range year round (adult males) and adult females that may or may not leave their home range during the non-nesting season. That adult male goshawks reside in their home range/territory for multiple years is similar to other *Accipiter/Astur* species. Adult females exhibit high inter-year breeding dispersal compared with other goshawk populations. 45% of adult female goshawks in Southeast Alaska paired with a different male in a different territory (i.e., moved to a new territory) in subsequent years. This is high female adult breeding dispersal. Some goshawk

experts suggest that this may be related to the poor prey landscape in the winter and the rain --- it's a rainforest.

I suggest that this section be reworked and more carefully written using better information, including the types of avian dispersal.

5. Abundance on the Tongass. There are NO recent abundance estimates. All of the estimates are old, dated and unverified. Just write that your most recent information is 25+ years old.
6. "Population trend on Tongass NF." The reference from Albert and Schoen is a habitat analysis, not a population trend. This is inappropriate use of the literature and this section does not establish a compelling scientific link between habitat and population abundance. While likely true, the authors need to establish such a relationship.

This section ignores a) goshawk food, and b) potential competitors. One possible competitor of nesting goshawks in Southeast Alaska is the Red-tailed Hawk. My observations while conducting field work in Southeast Alaska suggest that Red-tailed Hawks have increased, especially in areas associated with timber harvest.

7. "Habitat trend on Tongass"

"Large areas of old-growth habitat are distributed across the Tongass that are protected within reserves under current Forest Plan direction. These areas also have management intent to accelerate successional development of mature and maturing young growth towards late-seral conditions. Important areas of old-growth for prey such as beach and estuary fringe and riparian buffers are also largely protected on the Tongass. However, the sufficiency of Forest Plan protections has been questioned for goshawks and one of their key prey, northern flying squirrels (Smith 2013, Smith and Flaherty 2023)."

This is useful information, but it is unclear why you ignored another publication. See below.....Compositional Analysis and GIS for Study of Habitat Selection by Goshawks in Southeast Alaska. Grey W. Pendleton, Kimberly Titus, Eugene DeGayner, Craig J. Flatten and Richard E. Lowell. Journal of Agricultural, Biological, and Environmental Statistics. [Vol. 3, No. 3, Resource Selection Using Data from Geographical Information Systems \(GIS\) \(Sep., 1998\)](#), pp. 280-295.

"Timber harvest has been disproportional across the Tongass, with some biogeographic provinces more heavily logged than others. For example, the northern Prince of Wales Island biogeographic province has been subject to substantial reductions in contiguous high-volume forest (reduced by 94%) and average patch

sizes (decreased from 264 ha in 1954 to 73 ha in 2004; Albert and Schoen 2013). These changes have very likely resulted in goshawk population declines in this biogeographic province, which are reflected here and in other more heavily logged biogeographic provinces by changes in source-sink dynamics (Sonsthagen et al. 2012).” I agree with this tenet, but wonder why you did not also include some of the literature from norther Europe that is related to timber harvest and goshawks (albeit with different prey).

This section does not mention the differing goshawk prey – actually the lack of key goshawk prey - on Prince of Wales Island. The Lewis publications and numerous presentations by KTitus discuss the lack of goshawk prey in areas of the southern Tongass islands. Goshawks may have always nested in low density on POW and other islands.

Overall, this section seems to ignore the prey component of goshawk population dynamics.

8. “Habitat vulnerability or modification; other threats”

This section is generally good.

The section on climate is interesting speculation. One aspect that is not mentioned is that most adult radiotagged goshawks (n=68) died during the late winter. Many goshawk prey items (e.g, migratory birds, robin, thrushes,) depart Southeast Alaska in the winter. More rain events may influence this mortality.

9. “Life history and demographics”

I agree with most of this. Note that the goshawks myself and my colleagues studied for 10 years did not have low productivity. Nests did not typically fail.

10. “However, population numbers have stabilized in the past two to three decades in conjunction with much limited timber extraction practices.” There is NO basis for this statement. This seems to assume a direct correlation between habitat and goshawk numbers. This statement is not supported by a wealth of wildlife science. And there is no recent goshawk work on the Tongass to even make an educated guess. For example, I might assume that goshawks in high timber harvest areas of Southeast Alaska (including State and Alaska Native lands) have continued to decline. Reasons might include a) increases in Red-tailed Hawks, and b) declines in prey in prey-poor areas.

11. Overall, it might have been useful to have a peer-review of this document. The link between goshawk abundance/populations and habitat is weak in some places. The

use of the literature is spotty and some key information is just missing. Goshawk prey, and its distribution and relationship to habitat and timber harvest is not developed.