

## Stewardship Area 12, 13 & 15 boundary

---

The following describes the combined areas:

### Wildlife

---

The vegetative units within this stewardship area provide considerable diversity of habitat for wildlife. The different stand types in close proximity of each other and upper Hawk's Pond and Hawk's Hole Creek create a synergism of wildlife habitat value. Human presence probably has a muting effect, limiting use somewhat by larger mammals.

The north unit is predominantly a climax community of a long-term closed canopy coniferous forest. This is suitable habitat for canopy dwellers like Douglas Squirrels, owls, and bald eagles. Bats will probably roost in the deeply grooved bark of old trees. Rodents will live on the forest floor in the relict downed logs and stumps, and the on-going supply of downed wood. Snags as they occur will be used by woodpeckers and primary and secondary cavity nesting birds. Some cedar will get heart rot, creating cavities for dens for bear and other mammals. Generally this area will not provide significant food source for most species, but will be used mainly for thermal cover, a travel corridor and safe haven.

The red alder stand will soon mature and start breaking apart and considerable downed wood and snags will be created. The downed wood will provide habitat for up to 100 species. Insects will thrive in the decaying wood, and woodpeckers and small mammals will seek them out for food. Primary and secondary cavity nesting birds will use the snags. Fungi will thrive as well, creating food for small rodents, etc. There will also be an increase in the abundance of brushy, early succession plant species with the ever increasing light, and use by wildlife species such as band tail pigeons, grouse, black bear, deer, and song birds seeking berries and browse, and the numbers of hummingbirds, butterflies and bees seeking nectar will increase. There is potential for invasion of Himalayan blackberry. If this occurs it should be controlled to prevent crowding out of native species. Openings in this stand will probably last a long time, because only a scattered stand of cedar trees is present at this time to replace the existing alder, and crown closure of overstory won't be achievable with these widely spaced trees. Closure won't occur until new seedlings invade the site to fill in holes, and this isn't apt to occur very rapidly in an established, dense brush stand. The stand of brushy species should survive long term without human intervention. The groups of cedar trees will provide thermal and hiding cover as well as roosting for numerous species. The scattered 80 year old, poor quality Douglas-fir and western hemlock will create sources for enduring snags and downed logs, and while standing will provide perching for bald eagles and possibly osprey utilizing the pond.

The young stands of red alder and Douglas-fir will provide hiding and thermal cover, and lots of sources for downed wood and snags as natural thinning occurs. The small diameter wood will rapidly decay and have limited use, but the source will be ongoing, and diameter will increase over time. In alder areas the dense understory dominated by brushy species will provide the wildlife benefits outlined above. The young conifer will provide habitat for small forest raptors such as sharp-shinned and Cooper's hawk, which feed on the small birds that feed on brush and nest in small trees. Eventually the red alder will mature and die over time and wildlife benefits will be similar to those described in the preceding paragraph for the 45-50 year old red alder stand. The Douglas-fir stand should continually be closed canopy, with

crowns expanding as adjacent trees are crowded out. Long term wildlife use should be similar to the north coniferous stand.

The pond and edge provides habitat for numerous waterfowl, swallows, red wing blackbirds, beaver, amphibians, fish, etc. Past beaver activity is evident within and adjacent to Lower Hawk's Pond. Attesting to this are beaver hutches/dams and gnaw marks on surrounding trees and shrubs, and stumps. The Creek provides habitat for beaver, amphibians, fish, etc. Refer to Appendix I in this report for a more complete listing of wildlife species present.

## Objectives/Alternatives

---

- Allow the stands in this area to grow and mature, and allow succession to create structural and vegetative diversity and snags.
- The north unit will mature as a long lived, closed canopy "climax" forest. To increase structural and vegetative diversity, incremental variable density thinning could be done to create pockets or openings in the forest canopy. Removal of 30% of the overstory trees in patches would create diversity of habitat by creating openings which would facilitate the growth of a forest floor plant community. If this is done, newly established vegetation would increase food and shelter available to wildlife. Cascara, hawthorn, hazelnut, Pacific dogwood and other beneficial small trees and shrubs could be added in the areas to further enhance the stand for wildlife.
- Retain live Douglas-fir and western red cedar for long term natural snag recruitment. Retain trees of various ages to increase future structural diversity. Live trees with broken tops, fungal conks, injuries or existing cavities are especially valuable to wildlife and make good candidates for future snags. Retain all large hardwoods as most secondary cavity nesters prefer them over conifers.
- Snags could be created from a few of the scattered existing Douglas-fir by topping and/or girdling at the point where breakage is desired. This method may pose some safety hazards if the snags are created in close proximity to the trail. See snag worksheet for suggested snag densities. One could cut trees 8-10 feet high soon after they die to create short snags adjacent trails to reduce safety hazard. Nest boxes could be added for secondary cavity nesters, especially around the perimeter of Lower Hawk's Pond
- The red alder stands will eventually become decadent, but will become a long term haven for wildlife utilizing snags, and openings with brushy cover for browse, berries, and nectar.
- Retain western clumps of western red cedar in the 45-50 year old alder stand for wildlife thermal and hiding cover.
- Consider thinning the young Douglas-fir groves in the southwestern tip of this area, utilizing the D+5 rule and leaving the best quality, largest trees. This will accelerate the diameter growth of leave trees, and increase understory vegetation on the forest floor for wildlife. Pruning of lower branches could be done to improve aesthetics, if desired. Do not thin or prune some groves to retain areas for wildlife thermal and hiding cover.
- Leave the largest Douglas-fir trees in stand to add to aesthetics. Retain relict old stumps and downed logs.
- Consider planting Pacific yew trees in proximity of trail in areas.
- Minimize disturbance to Lower Hawk's Pond and Hawk's Hole Creek, except for the planned construction of a new bridge and stabilization of the trail on the steep slopes to the bridge.

## Field Observation Notes

---

1. Relict old-growth logs and stumps (many are fire charred with springboard notches)
2. Relatively uniform, closed canopy western red cedar stands in the north part of this area.
3. The viewing platform and Lower Hawk's Pond
4. The large, tall, straight red alder scattered in the stand in the north part - some to 32"DBH
5. Red alder snag with woodpecker holes and fungi between the viewing platform and intersection 13.
6. Differing vegetative stands resulting from past management
7. Beaver lodges in Lower Hawk's Hole pond
8. Hawk's Hole Creek