What Happened at Calliope Crossing?

by Jim Greer, ECAS member

As many Oregon birding enthusiasts know, Calliope Crossing is a location north of Sisters, Oregon, known for an abundance of bird and other wildlife species in a relatively small area. Its featured species is the Calliope hummingbird which has dutifully perched on dead willow branches over Indian Ford Creek each spring. The quaking aspen trees in the riparian zone along the creek have also produced an abundance of young birds each season by cavity nesting birds including, Red-naped and Williamson’s sapsuckers, tree swallows, woodpeckers, nuthatches and house wrens to name a few. Some individual dead aspen snags have had up to four species using cavities for nesting at the same time. Many common and less common bird species of warblers, vireos, grosbeaks, accipiters, flycatchers, and others also inhabit the area.

When birders arrived this spring they were greeted to a massive change to the vegetation and standing trees along Indian Ford Creek. Fire had left the forest floor black with ash, many snag trees important to wildlife had burned, and the fire had jumped to the far side of the creek burning stands of ponderosa pine and juniper. Some visitors described it as a disaster, others were sad to see such a change from greenery to blackened earth, and still others were simply struggling to understand what had happened.

This was in fact a restoration project. Originally planned as a fish passage project it grew to include the restoration of quaking aspen trees. Back in the spring of 2014 members of the East Cascades Audubon Society (ECAS) Conservation Committee met with Forest Service biologists to discuss possible improvements to Calliope Crossing. Primary concerns included keeping water levels in the wide expanse of the creek at current levels rather than lowering levels or creating unnecessary channels in the wetland due to replacement road culverts or other fish passage options. Thinning of trees to reduce shading necessary for future aspen was supported by ECAS as long as existing snags and some younger trees were protected for future cavity nesting birds. Options for new trails or camping in the area were not supported because of the existing levels of activity in the area.

Experts on the ecology of aspen were consulted by the Forest Service and it was determined the most effective tool for the regeneration of aspen was the moderate use of fire during the fall. Planning went forward on replacement of the culvert at the road crossing, selecting trees for thinning and meeting stringent protocols for a controlled burn. All were accomplished by late fall of 2017. By the time the 2018 Dean Hale Woodpecker Festival in Sisters was completed, many questions remained as to the status and future of habitat at Calliope Crossing.
On July 20th interested members of the ECAS met with Forest Service biologists to determine the success of the restoration project and if desired outcomes had occurred. A walk through the area determined results were mixed but positive for the long term. The large culvert at the road crossing appears to be maintaining water levels at historic levels although lower than past years when beaver were present. Native redband trout can now move freely throughout the lower watershed of Indian Ford Creek. Thinning of the ponderosa pine stand was accomplished as per the harvest prescription.

The burn had the greatest impact. Although there were a number of very hot areas where no new growth was seen, other more moderate fire temperatures allowed for excellent new growth of aspen many over two feet in height. Several of the larger live and dead aspen were lost to the fire which will have immediate impacts to future nesting birds. Aspen in the riparian zone that were protected from beavers were found burnt to the ground with the protective wire still wrapped around the base of the trees. The fire, as mentioned earlier, spread across the creek to the north shoreline killing pine and Juniper in the uplands. Since there are no proposals to harvest trees in that area, those trees killed by fire should provide wildlife snag habitat over time. Some of the older and dead willow trees were burned in the riparian zone as well, but new willow growth was showing a very positive response to the fire throughout the project area. As with many burns, noxious weeds have invaded the area.

With a general lifespan of only 100 years for aspen, most reviewers of the project felt the burn and thinning was a positive move for the long-term future of nesting bird species. There may be a reduction in bird activity in the short term due to the loss of aspen and snag trees by the fire. Species not as common in the area will benefit from the immediate change in vegetation response to the fire and thinning openings.

Work has already been done to reduce the level of noxious weeds. In addition to the ECAS work on monitoring activities, other cooperators with the Forest Service, such as Trout Unlimited and the Mule Deer Foundation, were important to the planning and financial support of the project. A bird banding station along Indian Ford Creek has provided important information on species using the area and will monitor any changes that may occur since the restoration project was completed.

As deer and elk have already started their annual consumption of new vegetation growth along Indian Ford Creek, it will be critical to implement the next steps in the restoration project through protective fencing and continued monitoring of the habitat and wildlife species. By this time next year Calliope Crossing should have a new and much greener look than last spring. (Photos by Jim Greer)