2015 SURVEYS FOR COASTAL GREENISH BLUE AND SEASIDE HOARY ELFIN BUTTERFLIES ON THE OREGON DUNES NRA

A summary report to the Siuslaw National Forest

Coastal Greenish Blue

Seaside Hoary Elfin

Prepared by Dana Ross, M.S. (Entomologist)
1005 NW 30th St.
Corvallis, OR 97330
moreyross@comcast.net
SUMMARY

In 2015, surveys for Coastal Greenish Blue (*Plebejus saepiolus littoralis/P. s. nr. insulanus*) and Seaside Hoary Elfin (*Callophrys polios maritima*) were undertaken within non-OHV portions of the Oregon Dunes National Recreation Area where the larval hostplants for the butterflies had been documented. On the first survey day, Forest Service personnel were trained to identify the target butterfly species and their potential habitats. While both the author (contract entomologist Dana Ross) and trainees conducted subsequent surveys in 2015, only those conducted by the former are presented here.

A new population of the Coastal Greenish Blue was discovered near Florence, Oregon. It is the first documented occurrence on federal lands in Oregon and is only the fourth extant population encountered in the past decade-plus. It is also the furthest north population known to exist at the present time. The finding underlines the importance of completing surveys of remaining potential habitats within both non-OHV and OHV areas of the Oregon Dunes NRA in a timely manner.

No populations of the Seaside Hoary Elfin were observed although many areas with the larval hostplant, commonly known as bearberry or kinnikinnick (*Arctostaphylos uva-ursi*), were located and searched. Additional areas of potential habitat remain and should be surveyed.

While not targeted, two apparently unknown populations of the Siuslaw Hairy-necked Tiger Beetle (*Cicindela hirticollis siuslawensis*) were discovered while searching for the Coastal Greenish Blue. It should be noted that little additional cost would be required to survey for both species concurrently.

**Biologist Field Training/First Seaside Hoary Elfin Surveys (April 16, 2015).** Field training and surveys were conducted at the traditional onset of flight (mid-April) for the Seaside Hoary Elfin. Participants were introduced to occupied habitats at Driftwood Beach State Wayside. After searching throughout the site, one individual of the Seaside Hoary Elfin was encountered within a patch of the larval hostplant (*Arctostaphylos uva-ursi*), but was wary (flushed easily) and could not be closely observed. A similar species, the Western Pine Elfin (*Callophrys eryphon purpurascens*) was common. Additional time was spent surveying the Alder Dune area (Siuslaw NF) where bearberry was locally abundant. Numerous patches of bearberry were searched by the group, but again, only the abundant Western Pine Elfin was observed. Based on these field observations, additional field surveys for Seaside Hoary Elfin were not recommended for another 7-10 days.

**Surveys for Seaside Hoary Elfin (May 7-16, 2015).** While inland areas experienced an unusually early spring, the coast appeared to be having a more typical seasonal progression, according to Forest Service personnel. Additional surveys for Seaside Hoary Elfin commenced with the onset of a mostly fair weather period in early May that would be expected to trigger additional spring butterflies to eclose (emerge). Areas within non-OHV portions of the Oregon Dunes NRA were surveyed one or more times where potential habitats had been mapped and were accessible
via trails and sand dune openings. In each case, patches of bearberry were carefully searched for elfin butterflies while slowly waving an insect net over the plants to flush perched adults that might otherwise be overlooked.

Seaside Hoary Elfin was not encountered during any May survey.

Figure 1 (and Cover Photo). Seaside Hoary Elfin (*Callophrys polios maritima*), underside of wings.

Figure 2. Bearberry patch along the Tahkenitch Creek trail. Note Scotch broom & beachgrass.
Figure 3. This small stabilized dune opening at Dellenback Dunes near Lakeside contained ample bearberry in a fairly contained and sheltered bowl and could be considered as a potential introduction site for Seaside Hoary Elfin.

Surveys for Coastal Creenish Blue (May 30-June 4, 2015). Based on past surveys, peak flight for the Coastal Greenish Blue occurs during late May and early June. Surveys within the Oregon Dunes NRA were timed to coincide with this time period. Few site records for the larval hostplant, *Trifolium wormskiioldii* (Cows Clover), were available for the Oregon Dunes NRA. As such, surveys took place within moist habitats that often support the clover, such as in the deflation plain of dunes, around seeps and in open sandy areas adjacent to streams and standing water. Such areas are most similar to occupied habitats at Lake Earl (CA), Cape Blanco State Park and Bullards Beach State Park.

These surveys revealed an undocumented population of the Coastal Greenish Blue in dune habitat near Florence (Lane County. It becomes the fourth extant population known globally.
Figures 4 (cover photo) and 5. Coastal Greenish Blue (Florence population), male dorsal (left) and verso views. (Images taken by the author with the imaging system at the Oregon State Arthropod Collection, Oregon State University, Corvallis.)

Figure 6. European beachgrass threatens portions of the butterfly’s habitat occupied by the clover hostplant.
Figure 7. Coastal Greenish Blue basking on willow leaf.