SPECIES FACT SHEET

Common Name: Seaside Hoary Elfin

Scientific Name: *Incisalia polia maritima* (Emmel, Emmel & Mattoon 1998)
(*Callophrys polios maritima* in Warren 2005)
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Lycaenidae

OR/WA BLM and FS Region 6 Units where Suspected or Documented:
The species is known from Lincoln, and Curry Counties in Oregon and Del Norte County in California.

There are no known populations on Forest Service or BLM lands. The site farthest north is near Waldport. The colonies are on the interface of "public beach lands" and private lands, in addition to the State Park land of Driftwood State Wayside where the elfin has been found in the past (not in 2005). From the map it looks as though the BLM has a small costal parcel on the Salem District just south of this site. Also from the map, the Siuslaw National Forest has lands south of the Waldport sites as well. Any coast lands in this area may have habitat for this butterfly.

The Pistol River site falls on ODOT and Oregon State Parks land in Curry County. The Lake Earl population in California appears to have a small refuge on California State Parks land, although most of that population is likely on private land.

The Oregon Natural Heritage Information Center (ORNHIC) lists the Coast Range as the ecosystem where the species occurs. They also list Washington and California. This species has been differentiated with related species in Washington so this listing is in error. ORNHIC lists Curry and Lincoln counties in Oregon.

Technical Description:
Larva – The following species-level description is from Allen et al. (2005):
"Bright apple-green with pale lateral stripe."

Adult - The following species-level description is from Pyle (2002):
"Wings less than one inch. Dusky gray-brown on the dorsal surface. Ventrum two-toned with vague, dark-edged dividing line with little white; inner half of VHW dark sienna, outer third heavily frosted with silvery white scales as is outer edge of VFW, and ringed with brown dots. Fringe checkered."

Details of how the subspecies maritima differs follows (Pyle 2002):
"It lacks tan above, and has increased gray frosting, diminished brown spots below, and smudged fringe-checkers."

Life History:
No published account of the entire life history specific to the subspecies maritima could be found, although John Emmel (Emmel, Emmel & Mattoon 1998) and David McCorkle (personal communication) have both reared adults from eggs. Existing flight records (The Evergreen Aurelians) for adult maritima include the period from mid-March through late May, with typical peak abundance occurring in mid to late April. In 2005, adults were present at Pistol River from March 13th through at least April 20th, and at Waldport area sites from at least April 18th through May 25th (Dana Ross & David McCorkle observations). The actual flight period at a given site will vary from year to year.

Species level information is as follows (Pyle 2002):
"Flattened greenish eggs often appear on flower stalks, yield rosy larvae later turning green with lighter stripes and dashes. The tan or darker brown, fuzzy chrysalis overwinters among the hostplant kinnikinnick or bearberry (Arctostaphylos uva-ursi). Most nectaring takes place on the hostplant flowers."

Range, Distribution (Current and Historic), and Abundance:

The subspecies maritima occurs from the type locality at Lake Earl (Del Norte County, California) north along the south & central Oregon coast to at least Driftwood Beach State Wayside just north of Waldport.

Historical- Populations are known only from the Lake Earl (Del Norte County, California), Pistol River (Curry County, Oregon) and Waldport (Lincoln County, Oregon) areas.

Current- Still extant (2005), are the single California population (Andrew Warren, personal communication, 2005) and the two Oregon populations (personal observation Ross 2005) described above.

The Seaside Hoary Elfin can be locally abundant, with hundreds of individuals occurring within the collective patches of the kinnikinnick hostplant at Lake Earl (Alan Barron, personal communication). Surveys of elfin habitat in the Waldport area in 2005 revealed from one to nearly 50 individuals in flight within a relatively small number of localized kinnikinnick patches during April and May (personal observation Ross 2005). 2005 surveys at Pistol River suggested a severely suppressed population, with only a few individuals recorded over 3 survey dates (personal observation Ross 2005).

Habitat Associations:
All life stages of the elfin are closely associated with the kinnikinnick hostplant. Oregon and California populations occupy sites on coastal bluffs and ancient sand dunes.

Threats:
The Seaside Hoary Elfin appears to occupy a relictual, post-glacial distribution. The subspecies maritima may be further limited by coastal habitat that is less prone to periodic devastation by large tsunamis (Paul Hammond & David McCorkle, personal communication). Unknown is the extent to which present-day extant colonies may be vulnerable to this phenomenon when they occur in the future.

Development and invasive plant species threaten all known Seaside Hoary Elfin populations. The potential for land development, and thus the destruction of most remaining elfin habitat, is high at all known sites. At both Oregon locations, shore pines, Scotch broom and/or exotic grasses were observed in abundance near most kinnikinnick patches and were generally observed to suppress kinnikinnick growth or to shade it, thus making it unsuitable for adult elfin use (personal observations, 2005). Additional threats to Seaside Hoary Elfin populations, such as from predators and parasitoids, may also exist but appear to be unpublished if known.

Conservation Considerations:
Surveys can be used to more accurately determine the current distribution of the Seaside Hoary Elfin and to establish its local relative abundance and the threats to populations wherever they occur. Searches for additional populations could be conducted, given the paucity of historical records for the taxon. *Arctostaphylos uva-ursi* is a generally common and widespread species- if somewhat localized- along the Northern California and Oregon coasts, and surveys there will likely reveal additional populations of the butterfly.

Scale is important when managing habitat for at risk butterflies. Division of a site into several management units is important, with butterfly habitat within a site evenly divided among these management units. Individual units could be managed in a rotation that assures at least 2/3 of the habitat is left unmanaged at any one time (Dana 1991), with three growing seasons between management activities in any one unit. This rotation should allow sufficient time for numbers to rebuild before the next management action (Dana 1991).

More study is needed to determine management actions at known sites. Managers may need to consult with an expert in managing habitat for butterflies before moving forward on restoration projects or projects that may adversely impact the sites.

Other pertinent information (includes references to Survey Protocols, etc):

Conservation status:
Heritage Global Rank: G5T2T3

Heritage State Rank: California (SNR-Unranked), Oregon (S1?-Critically Imperiled), Washington (SNR - Unranked)

BLM Status: Bureau Sensitive Species

USFS Status: No status

ATTACHMENTS:

(1) Survey Protocol
(2) Key to Identification of the Species
(3) List of References

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Survey Protocol

None have been established for this butterfly. Detecting this butterfly typically involves close visual inspection of the kinnikinnick hostplant and may require "sweeping" with a net to flush resting individuals from their perches so that they may be observed more easily.

Below is a general survey for butterfly searches that can be adapted to search for *Incisalia polia maritime*. It is recommended that searches be conducted by an expert in butterfly identification and survey or personnel trained by an expert.

All sites should be surveyed during the following environmental conditions.

Minimum temperature: Above 60 degrees F.

Cloud cover: Partly sunny or better. On cooler days the sun can play a very important role in getting butterflies to take to the air. On warmer days (above 60 degrees F), direct sunlight is less important, but a significant amount of the sun's energy should be coming through the clouds to help elevate the temperature of basking butterflies.

Wind: Less than 10 MPH. On windy days, butterflies will drop out of the air if they cannot maintain their direction and/or speed of flight.

Time of day: Between 10AM and 6PM. Success is most likely during the warmest parts of the day.

Time of year: Mid-March through late May, with typical peak abundance occurring in mid to late April. Currently occupied sites should be checked before the start of the search as flight times may vary due to weather conditions in the spring and early summer.

Follow this protocol after arriving at each potential site.

1. Approach the site and scan for any butterfly activity, as well as suitable habitat.
2. Fill out all of the site information on your datasheet.
3. Walk through the site slowly (about 5 minutes to walk 100 meters), look back and forth on either side, approximately 20 to 30 feet out. Do best to walk in a path such that you cover the entire site with this visual field, or at least all of the areas of suitable habitat.
4. If you leave the path you are walking to look at a particular butterfly, do your best to return to where you left your path when you resume walking/searching through the site.
5. When a suspected (*Incisalia polia maritima)* is encountered, net the butterfly to confirm its identification.
6. Record all data for sites whether butterflies are seen or not. In this way, we document both new sites, as well as our overall search effort.

Key to Identification of the Species

Butterfly field guides (such as Pyle 2002) are probably the best source of pictorial "keys". Dichotomous keys are rarely used for the identification of adult butterflies. Only the pine elfin (*Incisalia eryphon*) and the brown elfin *(Incisalia augustinus*) are likely to co-occur or be confused with the Seaside Hoary Elfin.

References

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NatureServe Explorer: http://www.natureserve.org/explorer/servlet/NatureServe?searchName=Callophrys+polios+maritima

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