

reflect the uncertainty of the species that was once extant on Laysan. *Pritchardia remota* has been recommended as a replacement because it is believed to be closest to the species of *Pritchardia* that once was present on the island. The recovery plan prepared for three plant species on Nihoa Island, including *P. remota*, proposes establishing a population on Laysan Island as part of the recovery process for this species. HINWR staff are working with staff from our Ecological Services, Pacific Islands Office, in this effort. At one time, there were 11 palms outplanted on Laysan from seeds brought directly from Nihoa Island. These survived until they were flooded by high lake levels and died. HINWR staff now have approximately 400 seedlings (from seed gathered at Nihoa Island) in a shade house on Laysan Island. These will be outplanted to suitable habitat on Laysan (E. Flint, pers. comm., 2002).

(6) *Comment*: One peer reviewer commented that it is essential that surveys for *Amaranthus brownii* be conducted on Nihoa Island in the winter to maximize its detection. This reviewer feels that it is inappropriate to recommend protective measures for a plant whose population has not been assessed in 20 years.

*Our Response*: *Amaranthus brownii* was last seen on Nihoa Island in 1983 as two colonies that totaled 35 plants. We have surveyed Nihoa for this species for over 20 years. While we agree that the winter months are the optimal time to survey for this winter annual species, as it is more easily detected during this period, access to the island during this season is extremely limited. Landings during the winter months can be difficult and dangerous due to sea conditions that can change without warning, stranding visitors on an island with a limited source of fresh water and no regular food supply. Because *Amaranthus brownii* was detected on Nihoa Island in 1983 and habitat conditions are the same, we consider the species to be extant (as a seedbank) and have found it appropriate to designate critical habitat for this species on Nihoa Island.

(7) *Comment*: One peer reviewer requested that the Service use *Cyperus pennatiformis*, the currently accepted name for *Mariscus pennatiformis*. Concern was expressed, as the current nomenclature is what will be used in scientific and grey literature, that there could be confusion otherwise. The reviewer also noted that *Cyperus pennatiformis* ssp. *bryanii* occurs only on Laysan Island and that *C. p.* ssp. *pennatiformis* occurs on Kauai, Maui,

Oahu, and Hawaii. As such, *C. p.* ssp. *bryanii* should be acknowledged as a distinct genetic population, even if the subspecies are not separately listed under the Act.

*Our Response*: We acknowledge that the current accepted nomenclature for this species has changed since the final rule listing *Mariscus pennatiformis* as endangered was published in 1994 (59 FR 94559). At that time, however, we followed the accepted taxonomic treatment in *The Manual of Flowering Plants of Hawaii* (Wagner *et al.* 1990). In the revised edition of the manual (Wagner *et al.* 1999), the species has been assigned to the genus *Cyperus*, and its subspecies are now varieties (Strong & Wagner 1997; Wagner *et al.* 1999). We plan to publish a notice revising the name for this species; however, this could not be accomplished prior to the completion of this final rule. The discussion of *Mariscus pennatiformis* in the section on Multi-Island Species under "Discussion of Plant Taxa" states that *M. p.* ssp. *bryanii* occurs only on Laysan Island. Listing as endangered at the species level provides protection for all varieties and subspecies of the species. Critical habitat is designated on Laysan Island for *M. p.* ssp. *bryanii*. Critical habitat was designated for *M. p.* ssp. *pennatiformis* on Kauai and Maui (68 FR 9116, 68 FR 25934, May 14, 2003) and is proposed on Oahu (67 FR 37108).

(8) *Comment*: One reviewer expressed concern regarding the Service's decision not to designate critical habitat for *Cenchrus agrimonioides* var. *laysanensis* because the taxon had not been seen in the wild for over 20 years and no viable genetic material is known to exist. The reviewer asserts that there have been no comprehensive botanical surveys of all of the islands where the taxon was known to exist, citing that the Service had made a similar decision for another plant species on Kauai, only to have it rediscovered.

*Our Response*: Critical habitat is not designated for *Cenchrus agrimonioides* var. *laysanensis*, the only variety of this species known from the NWHI, for the following reasons: *C. a.* var. *laysanensis* is historically known from Laysan, Midway, and Kure Atoll. This plant has not been reported on Laysan and Midway for over 70 and 100 years, respectively. A permanent year-round camp on Laysan, staffed by paid employees and volunteers, conducts periodic monitoring of both native and nonnative plant species, and *C. a.* var. *laysanensis* has not been seen during these monitoring efforts. On Midway, *C. a.* var. *laysanensis* was not seen during the most recent botanical surveys of

1995 and 1999. *Cenchrus agrimonioides* var. *laysanensis* has not been seen on Kure Atoll for over 20 years though the State DOFAW conducts annual seabird surveys and a botanical survey was conducted there as recently as 2001. In addition, no viable genetic material of this variety is known to exist. The rediscovery of currently unknown individual plants on these three islands and atolls is believed to be extremely unlikely (see D. *Criteria Used to Identify Critical Habitat*).

#### Issue 4: Nonnative Species

(9) *Comment*: One peer reviewer commented that the most important factor in maintaining biota on these remote islands is to have a vigorous and comprehensive quarantine system and a method to eliminate and investigate unauthorized landings. Additionally, the reviewer stressed the crucial nature of both an active and proactive eradication and management scheme for nonnative species.

*Our Response*: We have in place quarantine procedures for the HINWR, which include very strict measures to prevent the introduction of invasive invertebrate and vertebrate species. On islands where invasive nonnative species have already been introduced, we are implementing measures targeted at their eradication. In those areas where such eradication efforts have not yet been initiated, we are gathering information on methods by which we can best control and eliminate invasive taxa. Text was also provided in the "Discussion of Plant Taxa" to make it clear that the presence of rats and mice on Nihoa, Necker, and Laysan was a potential threat as these nonnative species are not currently present.

#### Summary of Changes From the Proposed Rule

Based on a review of public comments received on the critical habitat proposal, we have included the following several changes in this final rule:

(1) Based upon more refined GIS analysis, we corrected the total land area, 498 ha (1,232 ac) proposed as critical habitat for *Pritchardia remota* and *Mariscus pennatiformis* on Laysan Island to 493 ha (1,219 ac) designated as critical habitat for *Pritchardia remota* and *Mariscus pennatiformis* on Laysan Island.

(2) At the time we listed *Mariscus pennatiformis* (59 FR 94559), we followed the taxonomic treatment in the widely used and accepted *Manual of the Flowering Plants of Hawaii* (Wagner *et al.*, 1990). Since that time, the species has been assigned to the genus *Cyperus*