Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*

Dated: September 12, 1997.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

[FR Doc. 97–27548 Filed 10–16–97; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AE41

Endangered and Threatened Wildlife and Plants; Proposal to List the St. Andrew Beach Mouse as Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Fish and Wildlife Service (Service) proposes endangered status for the St. Andrew Beach Mouse (*Peromyscus polionotus peninsularis*) pursuant to the Endangered Species Act of 1973, as amended (Act). This subspecies is restricted to coastal sand dunes and had a historic distribution that included the northeast Florida panhandle from Gulf County into portions of Bay County. Its current range is limited to a portion of the St. Joseph Peninsula in Gulf County. Habitat impacts causing loss of mice and the species' local capability to recover from such impacts are primarily responsible for the range curtailment. Threats to beach mouse habitat include severe storms, coastal land development and its associated activities, and non-storm related, natural shoreline erosion. Additional threats include predation by free-ranging domestic cats and displacement by house mice. This proposal, if made final, would implement the protection provisions provided by the Act for this beach mouse.

DATES: Comments from all interested parties must be received by December 16, 1997. Public hearing requests must be received by December 1, 1997.

ADDRESSES: Comments and materials concerning this proposal should be sent to Michael M. Bentzien, Assistant Field Supervisor, U.S. Fish and Wildlife Service, 6620 Southpoint Drive South, Suite 310, Jacksonville, Florida 32216. Comments and materials received will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Dr. Michael M. Bentzien, at the above address (telephone 904/232–2580, ext. 106; facsimile 904/232–2404).

SUPPLEMENTARY INFORMATION:

Background

The oldfield mouse (*Peromyscus polionotus*) occurs in northeastern Mississippi, Alabama, Georgia, South Carolina, and Florida. Beach mice are coastal subspecies of the oldfield mouse restricted to beach and sand dune habitat. Hall (1981) recognized eight coastal subspecies whose common distinguishing characteristics include white feet, large ears, and large black eyes. Their fur is variously patterned in shades of white, yellow, brown, and grey. The head, back, and rump are darkly patterned, though to a lighter and less extensive degree than inland oldfield mice. The all-white underparts extend higher up to the sides than on the inland subspecies (Sumner 1926, Bowen 1968). Howell (1939) described the type (original) specimen of the St. Andrew beach mouse as having a very pale, buff-colored head and back with extensive white coloration underneath and along the sides. Bowen (1968) noted two distinct rump color pigmentations, one a tapered and the other a squared pattern, which extended to the thighs. Head and body lengths average 75 millimeters (mm) (2.95 inches (in)), tail mean length 52 mm (2.05 in), and hind foot mean length 18.5 mm (0.73 in) (James 1992).

Beach mice subspecies historically occurred on both the Atlantic Coast of Florida from St. Johns through Broward counties and the eastern Gulf of Mexico from Gulf County, Florida, to Baldwin County, Alabama (Ivey 1949, Bowen 1968, James 1992, Stout 1992, Gore and Schaefer 1993). The St. Andrew beach mouse is the easternmost of the five Gulf coast subspecies. Howell (1939) collected the type specimen at St. Andrew Point on Crooked Island, Tyndall Air Force Base, Bay County, Florida (type locality). Other historic collection records for the subspecies include nine additional specimens from the type locality, seven mice from St. Joseph Point and four mice from Cape San Blas on the St. Joseph Peninsula in Gulf County, 48 individuals at or near the town of Port St. Joe located on the central Gulf County coastal mainland, and four specimens near Money Bayou in eastern Gulf County (Bowen 1968). Based on these records, Bowen (1968) and James (1992) described the former range of the St. Andrew beach mouse as likely extending from the St. Joseph Spit (Peninsula) northwest along the coastal mainland adjacent to St. Joseph Bay, to Crooked Island at the East Pass of St. Andrews Bay. This range also included about 0.6 kilometer (km) (1 mile (mi)) of mainland sand dune habitat east of the landward end of the St. Joseph Peninsula to Money Bayou on the Gulf of Mexico. The absence of past collection records and lack of beach mouse sign and trapping success in the area east of Money Bayou to the southeastern corner of Gulf County (James 1987; J. Gore, Florida Game and Fresh Water Fish Commission, in litt. 1994) suggest that this area may not be part of the subspecies' historic range.

Coastal tidal marsh and upland habitat between the mainland city of Port St. Joe and the St. Joseph Peninsula naturally divided the former range of the St. Andrew beach mouse into two segments. Initial genetic analysis of a small sample of mice from these segments and another subspecies, the Choctawhatchee beach mouse (*P. polionotus allophrys*), from nearby habitat found similarities between the Crooked Island and St. Joseph Peninsula samples at one gene location (locus). The Crooked Island sample was distinctly different from the Choctawhatchee beach mouse sample at the same locus. Additional work is needed to determine if these patterns are consistent at several loci (Moyers 1997).

Typical beach mouse habitat generally consists of several rows of sand dunes paralleling the shoreline. Prevailing wind, beach sand, and vegetation combine to form and shape coastal dunes. A common complex of animal species, vegetation, and habitat types characterize the coastal sand dune ecosystem. The types and amount of animals, vegetation, and habitat may differ, however, among specific sites. The common types of sand dune habitat include frontal dunes, primary dunes, secondary dunes, inter and intradunal swales, and scrub dunes. Frontal dunes and primary dunes are those closest to

the shoreline, most recently formed, and highly dynamic. The foreslope of primary dunes grades into the developing frontal dunes on the open beach. Frontal dunes on the Gulf Coast are sparsely vegetated, usually by sea oats (*Uniola paniculata*), bluestem (*Schizachyrium maritimum*), beach grass (*Panicum amarum*), and sea rocket (*Cakile constricta*). Primary dunes also support stands of these species and include other broad-leaved plants such as seaside pennywort (*Hydrocotyle bonariensis*), seashore elder (*Iva imbricata*), and beach morning glory (*Ipomea stolonifera*) (Clewell 1985). Secondary dunes consist of one or more dune lines landward of the primary dune with a similar though denser vegetative cover. Interdunal swales are wet or dry depressions between primary and secondary dunes while intradunal swales occur within primary dunes as a result of wave action, storm surges, and wind erosion. Wet swales are those whose water table is at or near the surface. Swale vegetation includes plants found on primary and secondary dunes as well as salt meadow cordgrass (*Spartina patens*), rushes (*Juncus* sp.), sedges (*Cyperus* sp.), and saltgrass (*Distichlis spicata*). Scrub dunes are the oldest of the dune habitat types and are dominated by woody plants including saw palmetto (*Serenoa repens*), myrtle oak (*Quercus myrtifolia*), sand live oak (*Q. geminata*), sand pine (*Pinus clausa*), slash pine (*P. elliottii*), seaside rosemary (*Ceratiola ericoides*), greenbrier (*Smilax* sp.), and bush goldenrod (*Chrysoma pauciflosculosa*). Reindeer moss (*Cladonia leporina*) often covers otherwise bare dune surfaces. Some primary and secondary dune vegetation is also present but at reduced densities (Blair 1951, Gibson and Looney 1992). Size and density of understory and overstory vegetation may vary.

Trap surveys at Crooked Island and on the St. Joseph Peninsula documented the presence of St. Andrew beach mouse on frontal dunes, as well as on primary and secondary dunes (James 1987; Gore in litt. 1990, 1994; Bates 1992, Moyers *et al.* 1996, Mitchell *et al.* 1997). These results supported other surveys which found that the greatest concentration of most other beach mice subspecies occurred in these habitat types (Blair 1951, Hill 1989, Frank and Humphrey 1992, Holler 1992). This concentration is due in part to a predominance of plants whose seeds and fruits are important seasonal constituents of beach mouse diets (Moyers 1996).

Although beach mice occur on interdunal and intradunal swales, studies of other beach mouse subspecies indicate that, in general, they use this habitat type less frequently when compared to frontal, primary, and secondary dunes (Blair 1951, Hill 1989, Gore and Schaefer 1993, Novak 1997). James (1987) only rarely observed St. Andrew beach mouse tracks in the interdunal areas within St. Joseph Peninsula State Park (SJPSP), located within the northern 15 km (9 mi) of the peninsula.

Various researchers have also documented the occurrence of other beach mouse subspecies within scrub dunes (Extine and Stout 1987, Hill 1989, Rave and Holler 1992, Gore and Schaefer 1993, Swilling *et al.* 1996, Moyers *et al.* 1996, Novak 1997). Blair (1951) believed that the scrub dunes on Santa Rosa Island offered abundant food and cover for the Santa Rosa beach mouse (*P. p. leucocephalus*). Scrub dunes may also function as refugia during and after storms and as a source for recolonization of storm-damaged dunes (Moyers *et al.* 1996, Swilling *et al.* 1996). Their use by the St. Andrew beach mouse is not well documented. James (1987) noted the absence of tracks in scrub dunes within SJPSP, although she did collect mice in 1986 from well-vegetated back dunes on Crooked Island (James 1992). Moyers *et al.* (1996) captured beach mice within SJPSP in secondary dunes immediately adjacent to scrub dunes.

Based on a study of other Gulf coast subspecies that included habitat conditions following Hurricane Frederick, Meyers (1983) reported that the minimum post-storm area needed to allow beach mice to persist was 50 hectares (ha) (124 acres (ac)). He also determined that a habitat size from 100 to 200 ha (247 to 494 ac) supporting a population of 127 mice was optimal for that population to recover from habitat impacts produced by a storm of comparable intensity. Meyer's figures should be used with caution, however, since he did not know pre-storm habitat conditions or population numbers within the study area.

Beach mouse populations can at times undergo great seasonal variations in numbers (Bowen 1968, Extine and Stout 1987). Prior to human disturbance, hurricanes and tropical storms likely were the dominant factors producing rapid and possible widespread impacts on beach mice and their habitat. Because the St. Andrew beach mouse evolved under adverse weather conditions, the subspecies developed the capability to survive and recover from these periodic severe impacts to its numbers and habitat. During this century, however, more rapid land development, dune encroachment by pedestrians and vehicles, and military activities began to contribute to these impacts (James 1992). Bowen (1968) was unable to collect beach mice from one or more historic sites during a 1961 field trip. Hurricane Eloise split Crooked Island into east and west segments in 1975, and multiple attempts to collect beach mice from the western segment during the early and mid-1980's were unsuccessful (Gore in litt. 1987). During this same period, trap surveys collected small numbers of beach mice on the eastern segment. Limited trap and track surveys during the late 1980's found no evidence of beach mice within undeveloped coastal mainland habitat between Crooked Island and Money Bayou, as well as on the St. Joseph Peninsula from near the southern border of SJPSP through Cape San Blas to the northeastern end of the peninsula (Gore in litt. 1990, James 1987). Both surveys revealed that mice still existed on Crooked Island East and also occurred within SJPSP. Gore collected 3.6 mice per 100 trap nights during his 1989 survey within the park. Based on her survey results, James (1992) estimated the Crooked Island East population at 150 mice and the population within SJPSP at 500 mice. Gore speculated that the range wide population at its lowest contained several hundred mice.

Extensive surveying of primary, secondary, and scrub dune habitat on Crooked Island East during the 1990's revealed that the beach mouse population there no longer existed (Gore in litt. 1994, Holler in litt. 1994). Similar efforts at Cape San Blas on Eglin Air Force Base and U.S. Coast Guard properties yielded no mice (Gore in litt. 1994). Bates (1992) did capture 338 separate individuals within SJPSP at a rate of 26.64 mice per 100 trap nights. In 1993 and 1994, Gore (in litt. 1994) again sampled habitat between SJPSP and Cape San Blas and trapped nine beach mice for a capture rate of 7.56 mice per 100 trap nights. Based on the survey findings to date, Gore (in litt 1994, 1995) assumed that the St. Andrew beach mouse was then restricted to the northern 20 to 25 km (12.5 to 15.5 mi) of the St. Joseph Peninsula.

In October 1995, Hurricane Opal caused extensive coastal damage to the Florida panhandle. Habitat impacts within the St. Joseph Peninsula appeared more extensive outside SJPSP boundaries (Gore in litt. 1995). Using an average density estimate of 2.5 mice per hectare, Gore (in litt. 1995) calculated that the total population of St. Andrew beach mice remaining after the storm was around 190 individuals. Moyers *et al.* (1996) trapped a total of about 5.25 km (3 mi) of habitat throughout SJPSP

in December 1995 and captured 62 individuals for a rate of 3.44 mice per 100 trap nights. They estimated the population size within the sampled area at 127, a figure which compared favorably to Gore's post-hurricane estimate. Moyers (1996a) later collected an additional 11 mice on William J. Rish State Park and on some private parcels within the St. Joseph Peninsula immediately south of SJPSP. The most recent trap survey within SJPSP (February 1997) collected 117 mice for a capture rate of 9.00 mice per 100 trap nights (Mitchell *et al.* 1997). They estimated that SJPSP currently may support between 300 and 500 mice. The estimate represents a significant increase over the 1995 post-Hurricane Opal survey and is comparable to the last pre-Hurricane Opal survey within the park (Bates 1992).

In addition to habitat impacts, other factors believed to potentially threaten the continued existence of the St. Andrew beach mouse are predation, particularly by free-ranging domestic cats (*Felis silvestris*) and non-native coyotes (*Canis latrans*), and displacement by house mice (*Mus musculus*).

Previous Federal Action

The Service included the St. Andrew beach mouse as a category 2 species in its September 18, 1985, notice of review of vertebrate wildlife (50 FR 37958). At that time, category 2 species were defined as those for which information in possession of the Service indicated that proposing to list as endangered or threatened was possibly appropriate, but for which conclusive data on biological vulnerability and threat(s) were not currently available to support a proposed rule. The Service published an updated, combined animal notice of review (ANOR) on January 6, 1989, which retained the species' category 2 classification (54 FR 554). In the November 21, 1991, ANOR update, the St. Andrew beach mouse was designated a candidate for listing (56 FR 58804). The Service retained this classification in the November 15, 1994, ANOR (59 FR 59020) and in the most recent notice of review published on February 28, 1996 (61 FR 7596).

The processing of this proposed rule conforms with the Service's fiscal year 1997 listing priority guidance published in the **Federal Register** on December 5, 1996 (61 FR 64475). The guidance calls for giving highest priority to handling emergency situations (Tier 1) and second highest priority (Tier 2) to resolving the status of outstanding proposed listings. Third priority (Tier 3) is given to resolving the conservation status of candidate species and processing administrative findings on petitions to add species to the lists or reclassify threatened species to endangered status. The processing of this proposed rule falls under Tier 3. At this time, the Southeast Region has no pending Tier 1 actions and is near completion of its pending Tier 2 actions. Additionally, the guidance states that ''effective April 1, 1997, the Service will concurrently undertake all of the activities included in Tiers 1, 2, and 3'' (61 FR 64480).

Summary of Factors Affecting the Species

Section 4 of the Endangered Species Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the St. Andrew beach mouse (*Peromyscus polionotus peninsularis*) are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Using historic topographic maps and their habitat references, the Service calculated that 66 km (41 mi) of the estimated 86 km (53.5 mi) of linear area within the historic range of the St. Andrew beach mouse contained sand dune habitat. From field surveys, Gore (in litt. 1994, 1995) estimated the amount of recently occupied habitat to be between 20 and 23 km (14.3 to 12.5 mi), all within the northern two-thirds of the St. Joseph Peninsula. This represents up to a 68 percent curtailment of historic sand dune habitat within the subspecies' former range.

Natural events and manmade activities that have impacted the St. Andrew beach mouse and its habitat include severe storms, land development, military exercises on Crooked Island, dune encroachment by vehicles and pedestrians, and non-storm related shoreline erosion. Between 1871 and 1995, nearly 50 hurricanes or tropical storms occurred within 90 mi of St. Joe Bay, which is about midway within the historic range of the species. In this century, storm strength, proximity to the historic range, and degree of habitat impact have been especially intense during the last 30 years (Doehring *et al.* 1994). In 1975, Hurricane Eloise breached Crooked Island, dividing it into two segments and severely eroding and fragmenting dunes, particularly within the newly-formed western segment (R. Bates, pers. comm. 1995). In 1985, Hurricane Kate scoured dunes within the entire range of the St. Andrew beach mouse. These storms caused extensive blowouts in the high dunes throughout the St. Joseph Peninsula (James 1992). In 1995, Hurricane Opal, which made landfall 85 mi west of St. Joe Bay, severely damaged and fragmented frontal and primary sand dunes within the historic range of the beach mouse. The most seriously impacted areas were the unoccupied habitat from Crooked Island to Mexico Beach. Gore (in litt. 1995) estimated an average loss of 52 percent of occupied area within the St. Joseph Peninsula, with the greatest impacts occurring south of SJPSP. Although the population within the SJPSP has since recovered, the Service believes that, coupled with additional land development, consecutive years of severe weather or a single season of intense storms over or in close proximity to currently occupied habitat may result in extinction of the subspecies.

Land development has been primarily responsible for the permanent loss of St. Andrew beach mouse habitat. Historic maps suggest that earlier construction of State Road 98 and incorporated development from the vicinity of Port St. Joe to Mexico Beach occurred within one or more types of coastal sand dune habitat. Little or no suitable habitat currently occurs at the seaward side of some of these incorporated areas (J. Danford, Gulf County Division of Solid Waste, pers. comm. 1997). This density of development also tends to fragment remaining undeveloped habitat. Meyers (1983) believed that intense development could act as a barrier to migration, isolating mice within these habitat segments and making them more vulnerable to local extinction from one or more threats. Neither Gore (in litt. 1990) nor James (1987) found evidence of beach mice within these fragmented parcels located along the coast between Port St. Joe and Mexico Beach. The current status of beach mice within these parcels is unknown.

Gore (in litt. 1994) ranked continued habitat loss on the St. Joseph Peninsula as one of the most serious long-term threats to the St. Andrew beach mouse outside of the State parks. He attributed beach mouse presence in the area between SJPSP and Cape San Blas in 1994 to the relatively low density of housing compared to mainland areas, and the apparent low threat from free-ranging domestic cats, which he believed was related to the primary use

of the residences as vacation homes. In addition, most structures are set back from the frontal and primary dune lines. Since 1994, additional construction has occurred in this area, as well as within unoccupied habitat on the remainder of the peninsula (J. Danford, pers. comm. 1997). The construction has proceeded despite the unavailability of federally financed loans or flood insurance (see factor D). The Service believes that continued construction may result in intense development of secondary and scrub dunes, resulting in the severe fragmentation or loss of these habitat types. These areas are known to be important to other beach mice subspecies (see ''Background'' section). Intense impacts to these habitat types, coupled with severe storms affecting frontal and primary dunes, may contribute to the extinction of the St. Andrew beach mouse. Gulf County has constructed snow fencing and planted dune vegetation to restore frontal and primary dunes on the St. Joseph Peninsula and elsewhere damaged as a result of Hurricane Opal (J. Danford, pers. comm. 1997).

Other human activities impact beach mouse habitat. Gore (in litt. 1994) described the sand dunes east of Cape San Blas as having little vegetation and generally in poor quality. He attributed this situation to a combination of storm damage exacerbated by vehicular traffic on the beach. Although Gulf County has updated its beach driving ordinance in an attempt to eliminate dune impacts on the St. Joseph Peninsula (Gulf County Commission 1997), some areas continue to have problems with dune encroachment by all-terrain vehicles (D. Wibberg, Office of the Gulf County Board of Commissioners, pers. comm. 1997). Prior to 1985, trial exercises with military hovercraft contributed to habitat degradation on Crooked Island (James 1992). The Department of Defense has since discontinued this practice (R. Bates, Tyndall Air Force Base, pers. comm. 1995) and is restoring dune habitat and funding translocation of beach mice onto Crooked Island.

Severe natural erosion within a section of beach north of Cape San Blas, primarily within U.S. Coast Guard property on the St. Joseph Peninsula, has resulted in the loss of frontal, primary, and secondary dunes (Gore in litt. 1994). Sporadic natural shoreline erosion of frontal and primary dunes is also occurring north of this area to SJPSP, as well as between Cape San Blas and Money Bayou. The principal effect in the area of severe erosion has been to isolate occupied habitat on the northern peninsula from unoccupied habitat between Cape San Blas and Money Bayou. The additional natural erosion has resulted in some habitat fragmentation.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

This factor is not now known to be applicable.

C. Disease or Predation

The impact of parasites and pathogens on beach mice populations and their potential contribution to the decline of the St. Andrew beach mouse are unknown. Significant adverse impacts from these factors might occur when combined with or as a function of other threats. Studies and observations by various researchers strongly suggest that predation, especially by free-ranging domestic cats, is an important factor contributing to the loss of mice from local habitat within or adjacent to developed areas (Blair 1951, Humphrey and Barbour 1981, Holliman 1983, Humphrey *et al.* 1987). Bowen (1968) provided an anecdotal report on the complete absence of beach mouse sign on a 3.2 km (2 mi) stretch of beach having abundant cat tracks. Frank and Humphrey (1992) noted a reduction of cat sign on dunes and an increase in Anastasia Island beach mouse (*P. p. phasma*) numbers and mean survivorship following removal of 15 to 20 cats from the camping area at Anastasia State Recreation Area. Gore and Schaeffer (1993) found a significant inverse relationship between the ratio of Santa Rosa beach mice to cat tracks on sample transects within developed and undeveloped dune areas on Santa Rosa Island. Their median transects in the developed areas contained no mouse tracks and 13 cat tracks. Bates (1992) found that predators in SJPSP did not appear to concentrate near dunes and the infrequent house cat tracks observed occurred mainly near structures. Although Bates failed to capture beach mice in dunes adjacent to the camping areas, Moyers *et al.* (1996) did capture mice and observe tracks in these areas. Gore (in litt. 1994) believed that the house cat population then on private lands south of SJPSP was less of a problem than other developed areas because the residences there served mainly as seasonal vacation homes. He nevertheless believed further introductions associated with additional land development could pose a serious threat to beach mouse populations.

Other mammalian predators occurring on sand dunes within SJPSP include fox, bobcat, raccoon, and coyote (Bates 1992). Coyotes are relatively recent migrants to SJPSP and Crooked Island, where they have become predators on sea turtle nests (S. Shea, Tyndall Air Force Base, pers. comm. 1994; J. Bente, Florida Department of Environmental Protection, pers. comm. 1995).

D. The Inadequacy of Existing Regulatory Mechanisms

The Federal Coastal Barrier Resources Act of 1982 and the Coastal Barrier Improvement Act of 1990 (CBRA) prohibit most new Federal expenditures and financial assistance within Coastal Barrier Resources System (CBRS) units. CBRA also prohibits the sale of new Federal flood insurance for new construction or substantial improvements within otherwise protected areas. There are two CBRS units and one otherwise protected area within the historic range of the St. Andrew beach mouse. The Cape San Blas Unit (P30) covers all of the St. Joseph Peninsula, while the otherwise protected area (P30P) corresponds with the boundaries of St. Joseph Peninsula State Park. Habitat west of the city of Mexico Beach, including Crooked Island East and West, are part of the St. Andrew Complex Unit (P31). CBRA does not prohibit use of non-Federal or private funds to finance or insure projects within CBRS units or otherwise protected areas. As a result, coastal construction may still proceed within all remaining undeveloped parcels within the subspecies' historic range.

Eglin Air Force Base currently allows beach driving through its Cape San Blas property and adjacent property it leases from and manages for the U.S. Coast Guard. However, the agreement with Gulf County prohibits vehicles and pedestrians from encroaching on or near sand dunes. Strict enforcement of this provision has been difficult due to the distance of Eglin's main base from the Cape San Blas unit and the lack of onsite enforcement personnel. The distance also hampers efforts at evaluating and taking action on potential problems associated with free-ranging domestic cats.

State laws protect sea oats, a critical component of the dune vegetative community, from being picked on public land but do not prohibit this activity on private land nor their destruction during construction activities. State-regulated Coastal Construction Control Lines (CCCL) correspond to the limits of the coastal high hazard 100-year storm event impact area. Construction seaward of the CCCL requires permits whose stringent requirements generally result in protection of beach, frontal dune, and primary dune habitats (G. Chelicki, Florida Department of Environmental

Protection, pers. comm. 1997). The same protections are not afforded to secondary and scrub dune habitats occurring landward of the CCCL. The State has designated Crooked Island East and West as critical wildlife areas, which would protect plants and animals from take or disturbance by pedestrians, vehicles, and dogs, but this designation does not address habitat protection (S. Shea in litt. 1997).

The St. Andrew beach mouse is listed as a State endangered species. Chapter 39–27.002 of the Florida Administrative Code prohibits the take, possession, or sale of endangered species except as authorized by specific permit for the purpose of enhancing the survival potential of the species. The law does not provide for the protection or conservation of a listed species' habitat.

Bay County, Florida, restricts beach driving to permitted vendors. State parks on the St. Joseph Peninsula do not permit beach driving within their boundaries. Gulf County regulates beach driving on the peninsula between Indian Pass and SJPSP by ordinance and permits. The ordinances restrict the number of vehicle access points and prohibits driving in, on, or over sand dunes or vegetated areas. They do not address pedestrian encroachment. The most recent revised ordinance creates a 7.6 meter (25 foot) dune buffer zone within a portion of the St. Joseph Peninsula, in which beach driving and parking are prohibited (Misty Nabers, Florida Department of Environmental Protection, pers. comm. 1997). This revision does not apply to the section of the peninsula between about 3.2 km (2 mi) northwest of Cape San Blas to Money Bayou (D. Wibberg, pers. comm. 1997).

Gulf County does not have any ordinances relating to the ownership, control, and handling of free-ranging domestic cats.

E. Other Natural or Manmade Factors Affecting its Continued Existence

In addition to severe storms, other widespread climatic conditions that can occur within the range of the St. Andrew beach mouse include periods of drought and freezing weather. The extent of any direct or indirect impacts of these factors on beach mouse survival, either alone or in combination with manmade threats, is not known.

Storms and residential and commercial development can fragment and isolate beach mouse habitat. This isolation precludes movement and gene flow among other habitat blocks. In smaller blocks, the lack of gene flow may result in a loss of genetic diversity, which can reduce the population's fitness. Increased predation pressure and competition for available food and cover may further weaken populations through direct mortality and reduced reproductive success. The combined threats may result in severe decline leading to extinction of these isolated populations (Caughley and Gunn 1996).

The ecological similarity of house mice and oldfield mice (Gentry 1966, Briese and Smith 1973) suggests that competition and aggression may occur between these species. An inverse relationship appears to exist between the population densities of the house mouse and inland oldfield mice (Caldwell 1964, Caldwell and Gentry 1965, Gentry 1966). Humphrey and Barbour (1981) documented mutually exclusive distribution patterns of house mice and other Gulf coast beach mice, a pattern similar to that observed by Frank and Humphrey (1992) for the Anastasia Island beach mouse, and by Gore (in litt. 1987, 1990, 1994) and Holler (in litt. 1994) for the St. Andrew beach mouse. The significance of competition to the observed patterns is not clear. In general, the observations suggest that where conditions favor one of the two species, that species will predominate or exclude the other species. Briese and Smith (1973) noted that house mice primarily invade disturbed areas, such as when development occurs, and are able to establish themselves in these and adjacent habitats occupied by low densities of oldfield mice. They also noted that house mice seem to be less affected by predation from house cats than oldfield mice.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list the St. Andrew beach mouse (*Peromyscus polionotus peninsularis*) as endangered. The primary threats to the continued existence of the species are habitat impacts from periodic severe weather and land development, which result in direct loss of mice and the capability of remaining mice to recover from such impacts. Other potentially significant threats include predation by free-ranging domestic cats and possible competitive displacement by the house mouse. The Service considers the threat of extinction of high magnitude and imminent because of the more than two-thirds estimated range curtailment, the species' restriction to a single land unit, and the recent high frequency of severe storms occurring within or in close proximity to the species' historic range.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. ''Conservation'' means the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be threatened or endangered. The Service finds that designation of critical habitat is not prudent for the St. Andrew beach mouse at this time. Service regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist—(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

Designated critical habitat is protected by the Act only under section 7(a)(2), which provides that activities that are federally funded, permitted, or carried out may not destroy or adversely modify critical habitat. However, section 7(a)(2), which also prohibits Federal activities likely to jeopardize listed species, provides substantial protection to the habitat of listed species, even if critical habitat is not designated. Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species or result in the destruction or adverse modification of proposed critical habitat. For most species, including the St. Andrew beach mouse, the protection afforded the species' habitat through application of the no jeopardy standard is so strong, the Service believes there would be no direct net conservation benefit from designating critical habitat.

Regulations (50 CFR part 402.02) define ''jeopardize the continued

existence of'' as meaning to engage in an action that would reasonably be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species. ''Destruction or adverse modification'' is defined as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. The St. Andrew beach mouse is restricted to coastal sand dunes that consist of several rows paralleling the shoreline. The common types of sand dune habitat include frontal dunes, primary dunes, secondary dunes, inter and intradunal swales, and scrub dunes. Beach mice occur mostly in frontal, primary, and secondary dunes due in part to the predominance of plants whose seeds and fruits are important seasonal constituents of beach mouse diets. Further, scrub dunes may function as refugia during and after storms and as a source for recolonization of storm-damaged dunes. Because of the highly precarious status of the St. Andrew beach mouse, destruction or adverse modification of any of these habitat features to the point of appreciably diminishing habitat value for recovery and survival would also jeopardize the species' continued existence by reducing its reproduction, numbers, or distribution.

For the St. Andrew beach mouse, the Service, therefore, has determined that designation of critical habitat would not add any protection over that afforded by the jeopardy standard. Any appreciable diminishment of habitat sufficient to appreciably reduce the value of the habitat for survival and recovery would also appreciably reduce the likelihood of survival and recovery by reducing reproduction, numbers, or distribution. The Service has found this to be the case for several listed species, for which an appreciable reduction in habitat value would trigger the jeopardy standard, for example the Appalachian elktoe mussel, listed as endangered on November 23, 1994 (59 FR 60324), and three Texas aquatic invertebrates, listed as endangered on June 5, 1995 (60 FR 29537).

Within unoccupied lands under Federal management, both Eglin and Tyndall Air Force bases are actively involved in conservation of sand dune habitat. Eglin Air Force Base does not allow dune encroachment by vehicles and pedestrians within its Cape San Blas unit boundaries and closely reviews mission-related activities for potential habitat impacts (R. McWhite, Eglin Air Force Base, pers. comm. 1997). Eglin recently completed an ecological survey of Cape San Blas that will assist them in deciding how best to manage the natural resources within the unit. On Crooked Island, Tyndall Air Force Base restricts beach access on both east and west segments to pedestrians and authorized vehicles, and also prohibits dune encroachment. Natural resource personnel review all requests for military operations to minimize or eliminate potential habitat disturbances. Because of these current conditions, the Service believes that a designation of Crooked Island or Cape San Blas as critical habitat is not prudent because it would not result in any additional benefit to the species.

Based on the above discussion, the Service has determined that the lack of additional conservation benefit from critical habitat designation for this species makes such designation not prudent.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibition against certain practices. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer with the Service on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in the destruction or adverse modification of proposed critical habitat. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Federal agency actions that are expected to require conference and/or consultation as described in the preceding paragraph include mission-related activities authorized or carried out by Tyndall Air Force Base on Crooked Island and by Eglin Air Force Base at the Cape San Blas unit, following any translocation of beach mice to these locations. The Service's experience with other beach mice indicates that, with planning, beach mouse conservation and military activities are compatible.

The Federal Emergency Management Agency (FEMA) provides flood insurance for completed structures through the National Flood Insurance Program. Section 7 of the Act normally would require FEMA to consider conference or consultation with the Service where the agency provides flood insurance to private landowners with structures located in occupied habitat. In this case, private property occupied by the beach mouse within the St. Joseph Peninsula is also located within a CBRS unit and subject to the CBRA prohibitions against the acquisition of new federally-funded coastal flood insurance for new construction or substantial improvements (see factor D under ''Summary of Factors Affecting the Species''). The Service, therefore, believes the proposed listing will have no additional impact on the application of FEMA's flood insurance program.

U.S. Army Corps of Engineers involvement in the section 7 consultation process may result from the issuance of permits for the filling of wet interdunal swales subject to section 404 of the Clean Water Act (33 U.S.C. 1344 *et seq.*). Conference or consultation will be required should the Corps determine that such permit issuance may affect the St. Andrew beach mouse.

The Service may undertake internal consultations when carrying out recovery activities such as dune restoration and construction of pedestrian crossovers or when reviewing incidental take permit applications under section 10(a)(1)(B) of the Act.

The National Oceanic and Atmospheric Administration administers the Coastal Energy Impact Program (CEIP). CEIP is a Federal assistance program providing grant and loan assistance for use in planning studies, public works construction, land acquisition, and environmental loss mitigation projects, all associated with energy-related facility siting. Such a siting, however unlikely, within

occupied or potentially occupied habitat might result in some modification that minimizes or avoids impacts to the species. The great majority of section 7 consultations traditionally result either in no project changes or modifications rather than curtailment of the affected Federal activity.

Actions taken and in progress for the St. Andrew beach mouse include updated status surveys within a portion of the historic range, a population genetics analysis, and population viability modeling. Future actions include a translocation of some mice from the St. Joseph Peninsula to Crooked Island East through the cooperation and support of Tyndall Air Force Base. The Service plans to continue pursuing conservation actions it believes will be effective in measurably reducing the threats to the species' continued existence.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. The prohibitions, codified at 50 CFR 17.21, in part, make it illegal for any person subject to the jurisdiction of the United States to take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or any foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to agents of the Service and State conservation agencies.

Should this rule be finalized, the prohibitions of section 9 will not apply to St. Andrew Beach mice which were held in captivity or a controlled environment on the date of the final rulemaking, provided that such holding and any subsequent holding of such mice was not in the course of a commercial activity.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in the course of otherwise lawful activities.

It is the policy of the Service, published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of this listing on proposed and ongoing activities within the species' range. The Service believes that, based on the best available information, the following actions will not result in a violation of section 9:

(1) Beneficial activities whose implementation does not result in take of beach mice. Such activities include, but are not limited to, boardwalk construction on or over dunes, use of snow fencing and planting of local, native dune vegetation to accelerate dune restoration, and dune reconstruction using beach quality sand.

(2) Normal residential activities on unoccupied habitat that would not result in take of beach mice, such as, landscape maintenance, private development and dune access by vehicles and pedestrians.

(3) Activities authorized, funded, or carried out by a Federal agency when the action is conducted in accordance with section 7 of the Act.

Potential activities involving the St. Andrew beach mouse that the Service believes will likely be considered a violation of section 9 include, but are not limited to, the following:

(1) Take of St. Andrew beach mouse without a permit.

(2) Possession, sale, delivery, carrying, transportation, or shipping of illegally taken St. Andrew beach mice.

(3) Destruction or alteration of occupied habitat that results in the death of or injury to the St. Andrew beach mouse through the significant impairment of essential behaviors including breeding, feeding, or sheltering.

Questions regarding whether specific activities will constitute a violation of section 9 or to obtain approved guidelines for actions within beach mouse habitat, contact the Field Supervisor of the Service's Panama City Field Office, 1612 June Avenue, Panama City, Florida 32405–3721 (telephone 850/769–0552). Requests for copies of the regulations concerning listed animals and inquiries regarding prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Ecological Services, Permit Coordinator, 1875 Century Boulevard, Suite 200, Atlanta, Georgia 30345 (telephone 404/679–7110; facsimile 404/679–7081).

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this species;

(2) The location of any additional populations of this species and the reasons why any habitat should or should not be determined to be critical habitat pursuant to section 4 of the Act;

(3) Additional information concerning the range, distribution, and population size of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulations on this species will take into consideration the comments and any additional information received by the Service, and such communications may lead to a final regulation that differs from this proposal.

The Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days of the date of publication of the proposal in the **Federal Register**. Such requests must be made in writing and be addressed to the Jacksonville Field Office (see **ADDRESSES** section).

National Environmental Policy Act

The Fish and Wildlife Service has determined that Environmental Assessments and Environmental Impact Statements, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Act. A notice outlining the Service's reasons for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244).

Required Determinations

The Service has examined this regulation under the Paperwork Reduction Act of 1995 and found it to contain no information collection requirements.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the Jacksonville Field Office (see **ADDRESSES** section).

Author: The primary author of this document is John Milio (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and

recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, the Service hereby proposes to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500, unless otherwise noted.

2. Section 17.11(h) is amended by adding the following, in alphabetical order under MAMMALS, to the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Mammals							
*	*	*	*	*	*	*	
Mouse, St. Andrew beach.	Peromyscus polionotus peninsularis.	U.S.A.(FL)	Entire	E	.....	NA	NA
*	*	*	*	*	*	*	

Dated: October 2, 1997.

Jamie Rappaport Clark,

Director, Fish and Wildlife Service.

[FR Doc. 97–27549 Filed 10–16–97; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 285, 630, 644, and 678

[I.D. 100897B]

Atlantic Highly Migratory Species; Scoping Meetings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Scoping meetings; request for comments.

SUMMARY: NMFS will hold 21 scoping meetings to receive comments from fishery participants and other members of the public on Atlantic tunas, Atlantic swordfish, Atlantic shark, and Atlantic billfish fisheries. A scoping document of issues and options for Highly Migratory Species (HMS) fishery management is available for public comment (see **ADDRESSES**). The purpose of this announcement is to notify the public of meetings and provide for public participation in the management process.

DATES: Meetings will be held October 27 through November 17, 1997. See **SUPPLEMENTARY INFORMATION** for specific dates and times. Written comments on the issues must be received on or before December 1, 1997.

ADDRESSES: See **SUPPLEMENTARY INFORMATION** for meeting locations.

Written comments should be sent to Rebecca J. Lent, Chief, Highly Migratory Species Division, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. Clearly mark the outside of the envelope ''Scoping Comments.'' Copies of the scoping document can be requested by telephone: 301–713–2347 or fax: 301–713–1917.

FOR FURTHER INFORMATION CONTACT: Liz Lauck or Jill Stevenson, telephone: 301-713-2347.

SUPPLEMENTARY INFORMATION: NMFS is considering future management measures for Atlantic tunas, Atlantic swordfish, Atlantic shark, and Atlantic billfish fisheries to be included in a comprehensive Fishery Management Plan (FMP) for Atlantic tunas, swordfish and sharks, and an amendment to the Billfish FMP. Options for management may include long-term rebuilding programs, reallocation of quotas, recreational bag limits, commercial trip limits, minimum size restrictions, time/area closures, regional quotas, consistency between state and Federal regulations, gear restrictions, limited access, essential fish habitat, and permitting and reporting requirements.

Consistent with the new requirements of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), NMFS established an HMS Advisory Panel (AP) and a billfish AP to assist in developing and amending FMPs for HMS species. In the case of any species identified as overfished, the APs would also assist in developing rebuilding programs.

The scoping meetings are intended to gather public input on a broad range of options to be considered in addressing HMS issues. The scoping document was developed with input from the APs and outlines major issues and options under consideration. NMFS is seeking public input on these and other issues and options for HMS fisheries.

As part of the FMP development process, NMFS intends to prepare Environmental Impact Statement (EIS) documents due to the potentially significant impact of upcoming regulations on the human environment, and because changes have occurred in the fisheries since the last EISs were prepared (62 FR 45614, August 28, 1997). Participants in the fishery, including processors, may be required to operate under alternative management measures that may redistribute fishing effort and/or mortality in order to facilitate recovery of HMS. The EIS documents will address the impacts of potential future management options on the natural and human environment for the Atlantic tuna, Atlantic swordfish, Atlantic shark, and Atlantic billfish fisheries.

Special Accommodations

These meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Liz Lauck at least 5 days before the meeting date (see **FOR FURTHER INFORMATION CONTACT**). Written comments on the issues and options for future management of HMS fisheries are also welcome.

Meeting Locations

The meeting schedule is as follows:

Monday, Oct 27, 1997, 7–10 p.m.