

application must be made within 30 days of the grantee's appeal in the case of the appeal of termination or denial of refunding, and as soon as possible after the notice of suspension has been received by the grantee. It must state the applicant's interest in the proceeding, the evidence or arguments the applicant intends to contribute, and the necessity for the introduction of such evidence or arguments.

5. Section 1303.17 is added to read as follows:

§ 1303.17 Time for hearing and decision.

(a) Any hearing on an appeal by a grantee from a notice of suspension, termination, or denial of refunding must be commenced no later than 120 days from the date the grantee's appeal is received by the Departmental Appeals Board. The final decision in an appeal whether or not there is a hearing must be rendered not later than 60 days after the closing of the record, i.e., 60 days after the Board receives the final authorized submission in the case.

(b) All hearings will be conducted expeditiously and without undue delay or postponement.

(c) The time periods established in paragraph(a) of this section may be extended if:

(1) The parties jointly request a stay to engage in settlement negotiations,

(2) Either party requests summary disposition; or

(3) The Departmental Appeals Board determines that the Board is unable to hold a hearing or render its decision within the specified time period for reasons beyond the control of either party or the Board.

Catalog of Domestic Assistance Program Number 93.600, Project Head Start)

Dated: June 16, 1999.

Olivia A. Golden,

Assistant Secretary for Children and Families.

Approved: October 5, 1999.

Donna E. Shalala,

Secretary.

[FR Doc. 00-2049 Filed 1-31-00; 8:45 am]

BILLING CODE 4184-01-P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Part 195

[Docket No. RSPA-97-2095; Amendment 195-66]

RIN 2137-AC 11

Pipeline Safety: Adoption of Consensus Standards for Breakout Tanks; Correction

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Correcting amendments.

SUMMARY: This document corrects a final rule published April 2, 1999 (64 FR 15926). The final rule incorporates by reference consensus standards for aboveground steel storage tanks into the hazardous liquid pipeline safety regulations. This document makes two minor corrections to the final rule. First, it adds an industry publication, American Petroleum Institute (API) 1130 to the list of incorporated references. Second, it corrects the reference to the API Standard 653 to include Addendum 2.

DATES: Effective February 1, 2000. The incorporation by reference of the publication stated in the rule was approved by the Director of the Federal Register as of February 1, 2000.

FOR FURTHER INFORMATION CONTACT: Mike Israni, (202) 366-4571, or e-mail: mike.israni@rspa.dot.gov.

SUPPLEMENTARY INFORMATION:

When RSPA published the final rule in the *Federal Register*, it inadvertently omitted industry publication API 1130, Computational Pipeline Monitoring (1st Edition, 1995), from 49 CFR 195.3, Matter incorporated by reference. This document corrects this omission in the reference list by adding a reference to API 1130 in § 195.3 (c)(2)(ii) and by renumbering subsequent references. Also, in the final rule the preamble section listed API Standard 653 (Addenda 1 and 2), but the regulatory text section listed API Standard 653 (Addendum 1). This document corrects this discrepancy by specifying API Standard 653 (Addenda 1 & 2) in both places. We regret any confusion these omissions may have caused.

List of Subjects in 49 CFR Part 195

Incorporation by reference, Breakout tanks, Hazardous liquids and Petroleum, Carbon dioxide, Pipeline safety, Reporting and recordkeeping requirements.

RSPA amends Part 195 of title 49 of the Code of Federal Regulations as follows:

PART 195—TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE

Accordingly, 49 CFR Part 195 is corrected by making the following correcting amendments:

1. The authority citation for Part 195 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60118; and 49 CFR 1.53. PART=195

2. In § 195.3, (c)(2) is amended by redesignating existing paragraphs (c)(2)(ii) through (c)(2)(xv) as (c)(2)(iii) through (c)(2)(xvi) respectively, by adding a new paragraph (c)(2)(ii) and by revising redesignated paragraph (c)(2)(xiv) to read as follows:

§ 195.3 Matter incorporated by reference.

* * * * *

(c) * * *

(2) * * *

(ii) API 1130 "Computational Pipeline Monitoring" (1st Edition, 1995).

* * * * *

(xiv) API Standard 653 "Tank Inspection, Repair, Alteration, and Reconstruction" (2nd edition, December 1995, including Addenda 1 & 2).

* * * * *

Issued in Washington, DC on October 27, 1999.

Kelley S. Coyner,

Administrator.

[FR Doc. 00-340 Filed 1-31-00; 8:45 am]

BILLING CODE 4910-60-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AE20

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Blackburn's Sphinx Moth from the Hawaiian Islands

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine *Manduca blackburni*, the Blackburn's sphinx moth, to be an endangered species under the Endangered Species Act of 1973, as amended (Act). Historically, this species occurred on the Hawaiian islands of Kauai, Oahu, Molokai, Maui, and Hawaii, but until

recently, was known only from one population on Maui. Researchers observed a second population on Maui in 1992, and populations are now known to also occur on the islands of Kahoolawe and Hawaii. This moth is currently threatened by one or more of the following: habitat fragmentation and destruction due to development and agricultural practices resulting in the loss of its host plants, habitat degradation due to the effects of introduced animals and plants, predation, parasitism, competition for food or space by alien insects, and overcollection by private and commercial collectors. Due to its restricted distribution, this species is also vulnerable to extinction from random, catastrophic events, such as drought or fire. This final rule implements the Federal protections provided by the Act for this moth.

EFFECTIVE DATE: March 2, 2000.

ADDRESSES: You may inspect the complete file for this rule, by appointment, during normal business hours at the Pacific Islands Ecoregion, U.S. Fish and Wildlife Service, 300 Ala Moana Boulevard, Room 3-122, P.O. Box 50088, Honolulu, Hawaii 96850.

FOR FURTHER INFORMATION CONTACT: Robert Smith, Pacific Islands Manager, Ecological Services, Pacific Islands Ecoregion (see **ADDRESSES** section) (telephone: 808/541-2749; facsimile: 808/541-2756).

SUPPLEMENTARY INFORMATION:

Background

The Hawaiian archipelago includes eight large volcanic islands (Niihau, Kauai, Oahu, Molokai, Lanai, Kahoolawe, Maui, and Hawaii), as well as offshore islets, shoals, and atolls set on submerged volcanic remnants at the northwest end of the chain (the Northwestern Hawaiian Islands). Each island was formed sequentially from frequent, voluminous basaltic lava flows (Stearns 1985). The youngest island, Hawaii, is still volcanically active, and retains its form of coalesced, gently sloping, unweathered shield volcanoes (broadly rounded dome-shaped volcanoes formed by fluid and far-spreading lava flows). Vulcanism on the older islands has long since ceased, with subsequent erosion forming heavily weathered valleys with steep walls and well-developed streams and soils (Department of Geography 1983).

This range of topography creates a great diversity of climates. Windward (northeastern) slopes can receive up to 1,000 centimeters (cm) (400 inches (in)) of rain per year, while some leeward coasts that lie in the rain shadow of the

high volcanoes are classified as deserts, receiving as little as 25 cm (10 in) of rain annually. This climate has given rise to a rich diversity of plant communities, including coastal, dryland, montane, subalpine, and alpine; dry, moderately moist, and wet; and herblands, grasslands, shrublands, forests, and mixed communities (Gagne and Cuddihy 1990). These habitats support one of the most unusual arthropod faunas in the world, with an estimated 10,000 native species (Howarth 1990). Unusual characters of Hawaii's native arthropod fauna include the absence of social insects, such as ants and termites, extremely small geographic ranges, novel ecological shifts (unusual behavior and/or habitat), flightlessness, and loss of certain antipredator behaviors (Howarth 1990; Simon *et al.* 1984; Zimmerman 1948, 1970).

Blackburn's sphinx moth (*Manduca blackburni*) is Hawaii's largest native insect, with a wingspan of up to 12 cm (5 in). Like other sphinx moths (family Sphingidae), it has long, narrow forewings and a thick, spindle-shaped body tapered at both ends. It is grayish brown in color, with black bands across the apical (top) margins of the hind wings and five orange spots along each side of the abdomen. The larva is a typical, large "hornworm" caterpillar, with a spinelike process on the dorsal (upper) surface of the eighth abdominal segment. Caterpillars occur in two color forms, a bright green or a grayish phase. Both color forms have scattered white speckles throughout the dorsum (back), with the lateral (side) margin of each segment bearing a horizontal white stripe, and segments four to seven bearing diagonal stripes on the lateral margins (Zimmerman 1958; Betsy Gagne, Hawaii Department of Land and Natural Resources, pers. comm. 1998).

Blackburn's sphinx moth is closely related to the tomato hornworm (*Manduca quinquemaculata*) and has been confused with this species. Blackburn's sphinx moth was described by Butler (1880) as *Protoparce blackburni*, and named in honor of the Reverend Thomas Blackburn, who collected the first specimens. It was believed to be the same as the tomato hornworm (*Sphinx celeus* Hubner=*Sphinx quinquemaculatus* Haworth) by Meyrick (1899), and then treated as a subspecies (Rothschild and Jordan 1903, as cited by Riette 1986) and placed in the genus *Phlegethontius* (Zimmerman 1958). Riette (1986) demonstrated that Blackburn's sphinx moth is a distinct taxon in the genus *Manduca*, native to the Hawaiian Islands, and reinstated it as a full

species, *Manduca blackburni*. D'Abrera (1986) tentatively considered *Manduca blackburni* to be a synonym of *Manduca quinquemaculata*, but subsequent authors (Howarth and Mull 1992; Nishida 1992) have disagreed with this view, and the findings of Riette (1986) are accepted here. Several different common names have also been used for this species, including the tomato hawk-moth (Swezey 1924b), the tobacco hornworm (Browne 1941; van Dine 1905), the Hawaiian tobacco worm (Swezey 1931; Timberlake *et al.* 1921), the Hawaiian tomato hornworm (Fullaway and Krauss 1945; Zimmerman 1958), the Blackburn hawk moth (Hawaiian Entomological Society (HES) 1990; Howarth and Mull 1992), and Blackburn's sphinx moth (Service 1984). The name Blackburn's sphinx moth is used here.

In Hawaii, Blackburn's sphinx moth can be confused with the related sweetpotato hornworm (*Herse cingulata*). In contrast to the sweetpotato hornworm, adult Blackburn's sphinx moths can be distinguished by orange rather than white dorsal abdominal spots, with black borders on both the front and back margins of each segment, and a broader, marginal black band on the hind wing. The larvae of Blackburn's sphinx moth differ from those of the tomato hornworm and tobacco hornworm by having two dark longitudinal stripes on the head capsule, although this is not always the case. While these stripes are usually apparent in the dark phase, they are not always apparent in the green phase (Ellen VanGelder, University of Hawaii, pers. comm. 1997). Adult Blackburn's sphinx moth can be distinguished from the North American tomato hornworm and tobacco hornworm (*Manduca sexnotata*) by the presence of crescent-shaped white markings along the inner border of the black bands on the forewing (B. Gagne, pers. comm. 1998).

Larvae of Blackburn's sphinx moth feed on plants in the nightshade family (Solanaceae). The natural host plants are native shrubs in the genus *Solanum* (popolo), and the native tree, *Nothocestrum latifolium* ('aiea) (Riette 1986), on which the larvae consume leaves, stems, flowers, and buds (B. Gagne, pers. comm. 1994). However, many of the host plants recorded for this species are not native to the Hawaiian Islands, and include *Nicotiana tabacum* (commercial tobacco), *Nicotiana glauca* (tree tobacco), *Solanum melongena* (eggplant), *Lycopersicon esculentum* (tomato), and possibly *Datura stramonium* (Jimson weed) (Riette 1986). Development from egg to adult

can take as little as 56 days (Williams 1947), but pupae may remain in a state of torpor (inactivity) in the soil up to a year (Williams 1931; B. Gagne, pers. comm. 1994). Adult moths can be found throughout the year (Riotte 1986).

Historically, Blackburn's sphinx moth has been recorded from the islands of Kauai, Oahu, Molokai, Maui, and Hawaii, and collected from sea level to 760 meters (m) (2,500 feet (ft)) (Riotte 1986). Most historical records were from coastal, lowland, and dryland forest habitats in areas receiving less than 120 cm (50 in) annual rainfall. It appears that this moth was historically most common on Maui (Riotte 1986).

Very few specimens of this species have been seen since 1940, and after a concerted effort by staff at the B.P. Bishop Museum to relocate this species in the late 1970's, it was considered to be extinct (Gagne and Howarth 1985). In 1984, a single population was discovered on Maui (first Maui site or population) (Riotte 1986). The population is located on private and State lands, of which parts lie within a natural area reserve, part is used by the Hawaii National Guard for military training, and part is administered by the Department of Hawaiian Homelands. Between 1986 and 1991, a total of 6 specimens were taken in light traps 16 kilometers (km) (10 miles (mi)) from where the original population was discovered in 1984. These findings may indicate the presence of an additional population (Patrick Conant, Hawaii Department of Agriculture, pers. comm. 1994), although adult moths are strong fliers and these specimens could have originated at the known population. Identification of two larvae and signs of two additional larvae occurred in January 1997, although subsequent searches in September 1996 (Conant and VanGelder 1997) did not reveal any signs of eggs or larvae. Larvae are known to feed on 'aiea and tree tobacco (Frank Howarth, B.P. Bishop Museum, *in litt.* 1994), but the number of larvae and adults produced each year is unknown.

A second Maui site or population is known from one adult and one larvae observed in 1992 feeding on commercial tobacco in another location on private land near sea level (Fern Duvall, Division of Forestry and Wildlife (DOFAW), pers. comm. 1998), and from three larvae observed on tree tobacco on State land on Maui in January 1997, and again from the same number of larvae observed in February 1998 (F. Duvall, pers. comm. 1998). While researchers observed five to six eggs on tree tobacco in 1997, they found no eggs and no adults at the same site in 1998. There

are no native host plants in this area (F. Duvall, pers. comm. 1998).

In December 1997, researchers discovered a population of Blackburn's sphinx moth on the State-owned island of Kahoolawe (Arthur Medeiros, U.S. Geological Survey (USGS)—Biological Resources Division (BRD), *in litt.* 1998). This finding is the first record of the species on this island, and thus represents an extension of the species known range. Subsequent surveys (February and March 1998) indicate a population exists on Kahoolawe, with egg and larval densities (114 eggs and 93 larvae on 57 percent of tree tobacco plants searched) comparable to those at the Maui site (A. Medeiros, *in litt.* 1998). In addition, a fourth population of an unknown number of individuals was recently discovered (April 1998) on State land on the island of Hawaii (A. Medeiros, *in litt.* 1998), and a single, adult individual was observed in April 1998 in a different location on the island of Hawaii (Steve L. Montgomery, Hawaii Conservation Council, pers. comm. 1998). There are no native *Nothoecstrum* plants at this site, but both *Nicotiana* and *Solanum* are present in the area (S.L. Montgomery, pers. comm. 1998). On Kahoolawe, where the native host plant, 'aiea, is not found, eggs and larvae are known to occur on the non-native tree tobacco (A. Medeiros, *in litt.* 1998). Eggs and larvae of the Hawaii population of Blackburn's sphinx moth were found only on tree tobacco, although *Nothoecstrum breviflorum* ('aiea) is also present in the area (A. Medeiros, *in litt.* 1998).

Previous Federal Action

An initial comprehensive Notice of Review for Invertebrate Animals was published in the **Federal Register** on May 22, 1984 (49 FR 21664). In this notice we identified Blackburn's sphinx moth as a category 3A taxon under the Act of 1973, as amended (16 U.S.C. 1533 *et seq.*). Category 3A taxa were those for which we had persuasive evidence of extinction. We published an updated Notice of Review for animals on January 6, 1989 (54 FR 554). Although Blackburn's sphinx moth had been rediscovered by 1985, in the 1989 Notice of Review, this taxon was again identified as category 3A. In the next Notice of Review on November 15, 1994 (59 FR 58982), this species was reclassified as a category 1 candidate for listing. Category 1 candidates were those taxa for which we had on file sufficient information on biological vulnerability and threats to support preparation of listing proposals. Beginning with our February 28, 1996, Notice of Review (61 FR 7596), we

discontinued the designation of multiple categories of candidates, and only those taxa meeting the definition of former category 1 candidates are now considered candidates for listing purposes. In the February 28, 1996, Notice of Review, we identified Blackburn's sphinx moth as a candidate species (61 FR 7596). A proposed rule to list Blackburn's sphinx moth as endangered was published on April 2, 1997 (62 FR 15640). In the September 19, 1997, Notice of Review (62 FR 49398), this species was included as proposed for endangered status.

The processing of this final rule conforms with our Listing Priority Guidance published in the **Federal Register** on October 22, 1999 (64 FR 57114). The guidance clarifies the order in which we will process rulemakings. Highest priority is processing emergency listing rules for any species determined to face a significant and imminent risk to its well-being (Priority 1). Second priority (Priority 2) is processing final determinations on proposed additions to the lists of endangered and threatened wildlife and plants. Third priority is processing new proposals to add species to the lists. The processing of administrative petition findings (petitions filed under section 4 of the Act) is the fourth priority. The processing of critical habitat determinations (prudence and determinability decisions) and proposed or final designations of critical habitat will no longer be subject to prioritization under Listing Priority Guidance. Processing of this final rule is a Priority 2 action. We have updated this rule to reflect any changes in information concerning distribution, status, and threats since the publication of the proposed rule.

Summary of Comments and Recommendations

In the April 2, 1997, proposed rule and associated notifications, we invited all interested parties to submit factual reports or information that might contribute to the development of the final rule. The public comment period ended June 2, 1997. Appropriate Federal and State agencies, county governments, scientific organizations, and other interested parties were contacted and requested to comment. We published newspaper notices inviting public comment in the *Maui News* on April 18, 1997, and in the *Honolulu Star-Bulletin* and *Honolulu Advertiser* on April 21, 1997.

During the public comment period, we received comments from five parties. All parties supported the listing of Blackburn's sphinx moth as endangered.

None of the comments included additional information on the numbers of individuals and populations of the moth species. One of the comments suggested that listing will assist in the recovery of this species; one comment indicated that listing may aid in promoting conservation measures (e.g., fencing and weed control) that will assist the species; and one comment indicated that cooperative efforts between a variety of interested groups would be beneficial to the species. One commentor noted that he has been working closely with several groups, including us, to preserve the unique native habitat of dryland forest of Auwahi and Kanaio. The Hawaii Division of Forestry and Wildlife supported the listing of Blackburn's sphinx moth and at the same time expressed "reservations" about future listings of Hawaiian insects and the limited resources available for attainable recovery goals. One commentor noted that the listing would have little or no impact on the Hawaii Army National Guard's mission at Kanaio.

Peer Review

In accordance with our policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we also solicited the expert opinions of three appropriate and independent specialists regarding pertinent scientific or commercial data and assumptions relating to the taxonomy, population models, and supportive biological and ecological information for this species. We received no responses.

During the public comment period we received two letters from Arthur C. Medeiros, USGS-BRD, that included information on the newly discovered populations of Blackburn's sphinx moth. Steve L. Montgomery, Hawaii Conservation Council, provided us information on a recent moth sighting on the island of Hawaii, and Dr. Fern Duvall, DOFAW, provided information on moth larvae and eggs observed in two additional areas of Maui. We have included this information in this final rule.

Summary of Factors Affecting This Species

Section 4 of the Endangered Species Act and the 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 Blackburn's sphinx moth (*Manduca blackburni*) are as follows:

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

Native vegetation on all of the main Hawaiian Islands has undergone extreme alteration because of past and present land management practices including ranching, agricultural development, and deliberate introductions of alien animals and plants (Cuddihy and Stone 1990; Wagner *et al.* 1985). One of the primary threats facing Blackburn's sphinx moth is destruction of its habitat by feral (returned to an untamed state) animals. It is believed that the endemic plant, *Nothoecstrum latifolium* ('aiea), which is important for the survival of Blackburn's sphinx moth, is directly or indirectly affected by feral animals. All four species of *Nothoecstrum*, *N. latifolium*, *N. breviflorum*, *N. longifolium*, and *N. peltatum*, occur in dry to mesic (moderate moisture) forests, the habitat in which Blackburn's sphinx moth was most frequently recorded. Two species, *N. peltatum* on Kauai and *N. breviflorum* on Hawaii, are now federally endangered species (59 FR 3904, 59 FR 55770) due to severe degradation of dry forest habitats. *N. latifolium* occurs on Kauai, Oahu, Molokai, Lanai, and Maui. It is not presently a protected species, but it is declining and uncommon on all these islands (Hawaiian Heritage Program (HHP) 1993; Medeiros *et al.* 1993). The stand of trees at the first Maui site of Blackburn's sphinx moth may be the largest in the State (Medeiros *et al.* 1993) and plays an important role in supporting a population of this moth species (A. Medeiros, pers. comm. 1994).

Although *Nothoecstrum latifolium* presently occurs at moderate densities at the first Maui site location of Blackburn's sphinx moth (HHP 1993), there is no seedling survival (Medeiros *et al.* 1993) and the stand is in a degraded condition as a result of the presence of feral goats (*Capra hircus*) (Medeiros *et al.* 1993; F. G. Howarth, pers. comm. 1994; S.L. Montgomery, pers. comm. 1994). Goats were introduced to the Hawaiian Islands in 1792 and are now abundant in dry forests on Kauai, Molokai, Maui, and Hawaii, where they consume native vegetation, trample roots and seedlings, accelerate erosion, and promote the invasion of alien plants (Stone 1985; van Riper and van Riper 1982). *Bocconia frutescens* (tree poppy) is one alien plant that is spreading due to the activity of goats at the Maui Blackburn's

sphinx moth site. Tree poppy was first discovered in the Hawaiian Islands in 1920 and is now naturalized in dry forests on Maui and mesic forests on Hawaii (Medeiros *et al.* 1993; Symon 1990). On Maui, this fast-growing shrub is a serious threat to the native host plant of Blackburn's sphinx moth primarily through displacement and shading of immature plants (Medeiros *et al.* 1993; B. Gagne, pers. comm. 1994).

While the endangered *Nothoecstrum breviflorum* is reported in the area of the Hawaii population of Blackburn's sphinx moth (Marie Brueggemann, Service, pers. comm. 1998), there are no recorded associations of either eggs, larvae, or adults with this species. These trees are primarily threatened by habitat conversion associated with development; competition from alien species such as *Schinus terebinthifolius* (Christmas berry), *Pennisetum setaceum* (fountain grass), *Lantana camara* (lantana), and *Leucaena leucocephala* (koa haole); browsing by cattle; fire; and random environmental events; and reduced reproductive vigor due to the small number of existing individuals (59 FR 10312).

Although *Nothoecstrum* is not reported from Kahoolawe, there were very few surveys of this island prior to the intense ranching activities, that began in the middle of the last century, and the subsequent use of the island as a weapons range for the past 50 years. Prior to their removal, goats played a major role in the destruction of vegetation on Kahoolawe (Cuddihy and Stone 1990). It is likely that the reappearance of some vegetation as a result of the removal of the goats and the cessation of military bombing activities, has allowed Blackburn's sphinx moth to gain a foothold on the island. Although on the island of Kahoolawe the vegetation on which Blackburn's sphinx moth is currently dependent is alien and appears to adequately support production and growth of the sphinx moth, it is believed that the native host plant, 'aiea, is important to the survival of this species (A. Medeiros, pers. comm. 1998). Restoration of the native forests on Kahoolawe would benefit Blackburn's sphinx moth as well as other native plants and invertebrates on the island.

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

Rare butterflies and moths are highly prized by collectors, and an international trade exists for insect specimens for both live and decorative markets, as well as the specialist trade that supplies hobbyists, collectors, and

researchers (Morris *et al.* 1991; Williams 1996). The specialist trade differs from both the live and decorative market in that it concentrates on rare and threatened species (US Department of Justice (USDJ) 1993). In general, the rarer the species, the more valuable it is, and prices may exceed US \$2,000 for rare specimens (Morris *et al.* 1991). For example, during a 4-year investigation, special agents of the Service's Division of Law Enforcement executed warrants and seized over 30,000 endangered and/or protected butterflies and beetles with a wholesale commercial market value of about \$90,000 in the United States. The defendant, who was convicted, sold these rare butterflies and beetles in malls and State fairs (USDJ 1995). In another case, special agents found at least 13 species protected under the Act, and another 130 species illegally taken from lands administered by the Department of the Interior (USDJ 1995). The three men involved were convicted of poaching and commercial trade of butterflies protected under the Act (US Fish and Wildlife Service 1995; Williams 1996).

Sphinx moths, in general, are sought by collectors, and, as early as the 1950's, there was a standing reward for specimens of another rare Hawaiian sphinx moth (*Tinostoma smargditis*) (Zimmerman 1958). Specimens of Blackburn's sphinx moth have already been secured and traded by collectors and institutions (Dave Preston, B.P. Bishop Museum, pers. comm. 1994). According to unconfirmed reports specimens of Blackburn's sphinx moth from the Maui site are appearing in the specialist trade (A. Medeiros, pers. comm. 1998). Listing the species as federally endangered will increase its attractiveness to collectors (USDJ 1993). Unrestricted collecting and handling for scientific purposes are known to impact populations of other species of rare Lepidoptera (Murphy 1988), and are considered significant threats to Blackburn's sphinx moth. Because of the high value accorded such rarities, field collectors often take all individuals available (Morris *et al.* 1991). Even limited collection from the small populations of Blackburn's sphinx moth can have deleterious effects on its reproductive or genetic viability and lead to the eventual extinction of this species.

C. Disease or Predation

The geographic isolation of the Hawaiian Islands restricted the number of original successful colonizing arthropods and resulted in the development of an unusual fauna. An unusually small number (15 percent) of

the known families of insects are represented by native Hawaiian species (Howarth 1990). Some groups that often dominate continental arthropod faunas, such as social Hymenoptera (group nesting ants, bees, and wasps), are entirely absent from the native fauna. Commercial shipping and air cargo to Hawaii have now resulted in the establishment of over 2,500 species of alien arthropods (Howarth 1990; Howarth *et al.* 1994), with a continuing establishment rate of 10–20 new species per year (Beardsley 1962, 1979). In addition to the accidental establishment of alien species, private individuals and government agencies began importing and releasing alien predators and parasites for biological control of pests as early as 1865. These efforts resulted in the introduction of 243 alien species between 1890 and 1985, in some cases with the specific intent of reducing populations of native Hawaiian insects (Funasaki *et al.* 1988; Lai 1988). Alien arthropods, whether purposefully or accidentally introduced, pose the most serious threat to Hawaii's native insects, through direct predation and parasitism, and competition for food or space (Howarth and Medeiros 1989; Howarth and Ramsay 1991).

Ants are not a natural component of Hawaii's arthropod fauna, and native species evolved in the absence of predation pressure from ants. Ants can be particularly destructive predators because of their high densities, recruitment behavior, aggressiveness, and broad range of diet (Reimer 1993). Because they are generalist feeders, ants may affect prey populations independently of prey density, and may locate and destroy isolated individuals and populations (Nafus 1993a). At least 36 species of ants are known to be established in the Hawaiian Islands, and 3 particularly aggressive species have severely affected the native insect fauna (Zimmerman 1948). The island of Kahoolawe has not been extensively surveyed at this time, but since ants have adult winged reproductives, once established in Hawaii in general, they are likely to colonize suitable habitats on all islands in time, and several species are already known to occur on Kahoolawe. By the late 1870's, the big-headed ant (*Pheidole megacephala*) was present in Hawaii, and its predation on native insects was noted by Perkins (1913) who stated, "It may be said that no native Hawaiian Coleoptera insect can resist this predator, and it is practically useless to attempt to collect where it is well established. Just on the limits of its range one may occasionally meet with a few native beetles, e.g.,

species of *Plagithmysus*, often with these ants attached to their legs and bodies, but sooner or later they are quite exterminated from these localities."

With few exceptions, in areas where the big-headed ant is present, native insects, including most moths, are eliminated (Gagne; 1979; Gillespie and Reimer 1993; Perkins 1913). The big-headed ant generally does not occur at elevations higher than 600 m (2,000 ft), and is also restricted by rainfall, rarely being found in particularly dry (less than 35–50 cm (15–20 in) annually) or wet areas (more than 250 cm (100 in) annually) (Reimer *et al.* 1990). The big-headed ant is also known to be a predator of eggs and caterpillars of native Lepidoptera, and can completely exterminate populations (Illingworth 1915; Zimmerman 1958). This ant occurs at the first Blackburn's sphinx moth Maui site and is a direct threat to this population (Medeiros *et al.* 1993). Big-headed ants also occur on Kahoolawe and Hawaii (A. Medeiros, pers. comm. 1998).

The Argentine ant (*Iridomyrmex humilis*) was discovered on the island of Oahu in 1940 (Zimmerman 1941) and is now established on all the main islands. Unlike the big-headed ant, the Argentine ant is primarily confined to elevations higher than 500 m (1,600 ft) in areas of moderate rainfall (Reimer *et al.* 1990). This species can reduce populations or even eliminate native arthropods at high elevations in Haleakala National Park on Maui (Cole *et al.* 1992). On Maui, within 16 km (10 mi) of the Blackburn's sphinx moth population, Argentine ants are significant predators on pest fruit flies (Wong *et al.* 1984). Argentine ants have also been reported on the islands of Kahoolawe and Hawaii (Adam Asquith, Service, and A. Medeiros, pers. comm. 1998).

The long-legged ant (*Anoplolepis longipes*) appeared in Hawaii in 1952 and now occurs on Oahu, Maui, and Hawaii (Reimer *et al.* 1990). It inhabits elevations under 600 m (2,000 ft), in rocky areas with moderate annual rainfall of less than 250 cm (100 in) (Reimer *et al.* 1990). Direct observations indicate that Hawaiian arthropods are susceptible to predation by this species (Gillespie and Reimer 1993), and Hardy (1979) documented the disappearance of most native insects from Pua'alu'u in the Kipahulu District on Maui after the area was invaded by the long-legged ant.

At least two species of fire ants, *Solenopsis geminata* and *Solenopsis papuana*, are also important threats (Gillespie and Reimer 1993; Reagan 1986) and occur on all of the major islands (Reimer *et al.* 1990). Ants,

including the fire ant, *S. geminita*, are known to be the most important and consistent mortality factor on eggs, and probably larvae, of the butterfly *Hypolimnas bolina* in Guam, even where both predator and prey are native (Nafus 1993a, 1993c). *Solenopsis geminita* occurs at the Maui moth location (A. Medeiros, pers. comm. 1998). *Solenopsis geminita* is also known to be a significant predator on pest fruit flies in Hawaii (Wong and Wong 1988). *Solenopsis papuana* is the only abundant, aggressive ant that has invaded intact mesic forest above 600 m (2,000 ft) and is still expanding its range in Hawaii (Reimer 1993).

Ochetellus glaber (No Common Name (NCN)), a recently reported ant introduction, occurs in the same habitat utilized on Kahoolawe by Blackburn's sphinx moth (A. Medeiros, pers. comm. 1998). *Ochetellus glaber* was found in relatively high numbers foraging on shrubs of *Nicotiana* where eggs and larvae of the sphinx moth occur. In one instance, large numbers of *Ochetellus glaber* were observed emerging from a dead moth larvae they had either predated or scavenged (A. Medeiros, pers. comm. 1998).

On Kahoolawe, a large proportion of tagged Blackburn's sphinx moth eggs disappeared without hatching, potentially indicating high egg predation, likely by ants, but perhaps by birds, or dislodging by high winds (A. Medeiros, pers. comm. 1998).

Hawaii also has a limited fauna of native Hymenoptera wasp species, with only two native species in the family Braconidae (Beardsley 1961), neither of which attack Blackburn's sphinx moth. In contrast, species of Braconidae are common predators (parasitoids) on the larvae of the tobacco hornworm and the tomato hornworm in North America (Gillmore 1938). At least 74 alien species, in 41 genera, of braconid wasps are now established in Hawaii, of which at least 35 species were purposefully introduced as biological control agents (Nishida 1992). Most species of alien Braconidae and Ichneumonidae wasps parasitic on Lepidoptera are not host specific, but attack the caterpillars or pupae of a variety of moths (Funasaki *et al.* 1988; Zimmerman 1948, 1978) and have become the dominant larval parasitoids even in intact, high-elevation, native forest areas of Hawaii (Howarth *et al.* 1994; Zimmerman 1948). These wasps lay their eggs in the eggs or caterpillars of Lepidoptera. Upon hatching, the wasp larvae consume internal tissues, eventually destroying the host. At least one species established in Hawaii, *Hypotheser exiguae* (NCN), is known to attack the

tobacco hornworm and the related tomato hornworm in North America (Carlson 1979). This wasp is recorded from all of the main islands except Lanai (Nishida 1992) and is a recorded parasitoid of the lawn armyworm (*Spodoptera maurita*) on tree tobacco on Maui, an alternate host of Blackburn's sphinx moth (Swezey 1927). No direct documentation exists of alien braconid and ichneumonid wasps parasitizing Blackburn's sphinx moth because of its rarity, but given the abundance and the breadth of available hosts of these wasps, they are considered significant threats to this species (Gagne and Howarth 1985; Howarth 1983; Howarth *et al.* 1994; F. G. Howarth, pers. comm. 1994).

Small wasps in the family Trichogrammatidae parasitize insect eggs, with numerous adults sometimes developing within a single host egg. The taxonomy of this group is confusing, and it is unclear if Hawaii has any native species (Nishida 1992, John Beardsley, University of Hawaii, pers. comm. 1994). Several alien species are established in Hawaii (Nishida 1992), including *Trichogramma minutum* (NCN), which is known to attack the sweet potato hornworm in Hawaii (Fullaway and Krauss 1945). In 1929, the wasp *Trichogramma chilonis* (NCN) was purposefully introduced into Hawaii as a biological control agent for the Asiatic rice borer (*Chilo suppressalis*) (Funasaki *et al.* 1988). This wasp parasitizes the eggs of a variety of Lepidoptera in Hawaii, including sphinx moths (Funasaki *et al.* 1988). Williams (1947) found 70 percent of the eggs of Blackburn's sphinx moth to be parasitized by a *Trichogramma* wasp that was probably this species. Over 80 percent of the eggs of the alien grasswebworm (*Herpetogramma licarsisalis*) in Hawaii are parasitized by these wasps (Davis 1969). In Guam, *Trichogramma chilonis* effectively limits populations of the sweetpotato hornworm (Nafus and Schreiner 1986), and the sweet potato hornworm is considered under complete biological control by this wasp in Hawaii (Lai 1988). While this wasp probably affects Blackburn's sphinx moth in a density-dependent manner (Nafus 1993a), and theoretically is unlikely to directly cause extinction of a population or the species, the availability of more abundant, alternate hosts (any other lepidopteran eggs) may allow for the extirpation of Blackburn's sphinx moth by this or other egg parasites as part of a broader host base (Howarth 1991; Nafus 1993b; Tothill *et al.* 1930).

Hawaii has no native parasitic flies in the family Tachinidae (Nishida 1992).

Two species of tachinid flies, *Lespesia archippivora* (NCN) and *Chaetogaedia monticola* (NCN), were purposefully introduced to Hawaii for control of army worms (Funasaki *et al.* 1988; Nishida 1992). These flies lay their eggs externally on caterpillars, and upon hatching, the larvae burrow into the host, attach to the inside surface of the cuticle, and consume the soft tissues (Etchegaray and Nishida 1975b). In North America, *Chaetogaedia monticola* is known to attack at least 36 species of Lepidoptera in 8 families, including sphinx moths; *Lespesia archippivora* is known to attack over 60 species of Lepidoptera in 13 families, including sphinx moths (Arnaud 1978). These species are on record as parasites of a variety of Lepidoptera in Hawaii and are believed to depress populations of at least two native species of moths (Lai 1988). Over 40 percent of the caterpillars of the monarch butterfly (*Danaus plexippus*) on Oahu are parasitized by *Lespesia archippivora* (Etchegaray and Nishida 1975a), and the introduction of a related species to Fiji resulted in the extinction of a native moth there (Howarth 1991; Tothill *et al.* 1930). Both of these species occur on Maui and are direct threats to Blackburn's sphinx moth.

D. The Inadequacy of Existing Regulatory Mechanisms

Blackburn's sphinx moth occurs on State-owned and private lands. This species currently receives no formal protection on any of these lands.

Federal listing would automatically invoke listing under Hawaii State law, which prohibits taking and encourages conservation by State government agencies. Hawaii's Endangered Species Act (HRS, Sect. 195D-4(a)) states, "Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the (Federal) Endangered Species Act shall be deemed to be an endangered species under the provisions of this chapter and any indigenous species of aquatic life, wildlife, or land plant that has been determined to be a threatened species pursuant to the (Federal) Endangered Species Act shall be deemed to be a threatened species under the provisions of this chapter." Further, the State may enter into agreements with Federal agencies to administer and manage any area required for the conservation, management, enhancement, or protection of endangered species (HRS, Sect. 195D-5(c)). Funds for these activities could be made available under section 6 of the Federal Act (State Cooperative Agreements).

Alien predatory and parasitic insects are an important reason for the reduction in range and abundance of Blackburn's sphinx moth, and may be the most serious present threat to its continued existence. Some of these alien species were intentionally introduced by the State of Hawaii's Department of Agriculture or other agricultural agencies (Funasaki *et al.* 1988), and importations and augmentations of lepidopteran parasitoids continue. Federal regulations for the introductions of biocontrol agents have not adequately protected this species (Lockwood 1993). Presently, there are no Federal statutes that require biocontrol agents to be reviewed before they are introduced, and the limited Federal review process requires consideration of potential harm only to economically important species (Miller and Aplet 1993). Although the State of Hawaii requires that new introductions be reviewed before release (HRS Chapt. 150A), postrelease biology and host range cannot be predicted from laboratory studies (Gonzalez and Gilstrap 1992; Roderick 1992), and the purposeful release or augmentation of any lepidopteran predator or parasitoid is a potential threat to Blackburn's sphinx moth (Gagne; and Howarth 1985; Simberloff 1992).

E. Other Natural or Manmade Factors Affecting Its Continued Existence

The small, restricted populations of Blackburn's sphinx moth increase the potential for extinction from random events. Sphinx moths are typically strong fliers and likely existed as a series of metapopulations on the various islands (Harrison *et al.* 1988). Considerable intra-island movement between populations and continued colonizations and extinctions in new localities probably occurred, accounting for the historical records in tobacco crops and gardens (Swezey 1924a, 1924b; Zimmerman 1958). The apparent extirpation of this moth at most lower elevations and in more mesic areas is thought to correlate with the presence of alien predators and parasitoids and the loss of its preferred host plants. Thus, if any of the known populations of the Blackburn's sphinx moth is severely reduced in size, little potential exists for recolonization or "rescue" (Brown and Kodric-Brown 1977) of the remaining population by immigrants (Arnold 1983). Research studies at the first Maui site suggest that during the recent drought period, proportionally more eggs and larvae occurred on 'aiea than on tree tobacco, in a general reversal of the trend during normal rainfall conditions (A. Medeiros, pers. comm.

1998). Tree tobacco is a quick-growing, pioneer shrub, while 'aiea is a slow-growing, drought-adapted, long-lived native tree that does well in drought periods when tree tobacco is dying or losing its foliage (A. Medeiros, pers. comm. 1998). This adaptation emphasizes the importance of the native host plant to the survival of Blackburn's sphinx moth.

We carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to make this rule final. This species is threatened by habitat degradation by introduced animals and loss of its native host plant, overcollection, and predation by ants and alien parasitoid wasps. The small number of populations of this species also makes it susceptible to extinction from random events. Because this species is in danger of extinction throughout all of its range, it fits the definition of endangered as defined in the Act. Based on this evaluation, we find that the Blackburn's sphinx moth should be listed as endangered. Although we have considered all available alternatives to this action, such alternatives would not be in accordance with the Act. Listing the species as a threatened species would not accurately reflect the status of Blackburn's sphinx moth based on the information available.

Critical Habitat

Critical habitat is defined in section 3 of the Act as 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 essential to the conservation of the species and that may require special management considerations or protection; and 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.

Critical habitat designation directly affects only Federal agency actions through consultation under section 7(a)(2) of the Act. 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 a listed species or destroy or adversely modify its critical habitat.

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, we designate critical habitat at the time the species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that the 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.

The Final Listing Priority Guidance for FY 1999/2000 (64 FR 57114) states that the processing of critical habitat determinations (prudence and determinability decisions) and proposed or final designations will no longer be subject to prioritization under the Listing Priority Guidance. Critical habitat determinations, which were previously included in final listing rules published in the **Federal Register**, may now be processed separately, in which case stand-alone critical habitat determinations will be published as notices in the **Federal Register**. We will undertake critical habitat determinations and designations during FY 2000 as allowed by our funding allocation for that year. As explained in detail in the Listing Priority Guidance, our listing budget is currently insufficient to allow us to immediately complete all of the listing actions required by the Act.

In the proposed rule, we indicated that designation of critical habitat was not prudent for Blackburn's sphinx moth because of a concern that publication of precise maps and descriptions of critical habitat in the **Federal Register** could lead to incidents of vandalism and destruction of habitat, as well as take by insect collectors. We also indicated that designation of critical habitat was not prudent because we believed it would not provide any additional benefit beyond that provided through listing as endangered. In the last few years, a series of court decisions have overturned Service determinations regarding a variety of species that designation of critical habitat would not be prudent (e.g., *Natural Resources Defense Council v. U.S. Department of the Interior* 113 F. 3d 1121 (9th Cir. 1997); *Conservation Council for Hawaii v. Babbitt*, 2 F. Supp. 2d 1280 (D. Hawaii 1998)). Based on the standards applied in those judicial opinions, we have re-examined the question of

whether critical habitat for Blackburn's sphinx moth would be prudent.

Due to the small number of populations, Blackburn's sphinx moth is vulnerable to unrestricted collection, vandalism, or other disturbance. Rare butterflies and moths are highly prized by collectors and an international, commercial trade exists for insect specimens which are sought for both live and decorative markets, as well as the specialist trade that supplies hobbyists, collectors, and researchers (Morris *et al.* 1991) (see Factor B). We are concerned that these threats might be exacerbated by the publication of critical habitat maps and further dissemination of locational information. However, consistent with recent case law, at this time, we believe there may be benefits of critical habitat designation in some areas that may outweigh the risks.

In the case of this species, there may be some benefits to designation of critical habitat. The primary regulatory effect of critical habitat is the section 7 requirement that Federal agencies refrain from taking any action that destroys or adversely modifies critical habitat. While a critical habitat designation for habitat currently occupied by this species would not be likely to change the section 7 consultation outcome because an action that destroys or adversely modifies such critical habitat would also be likely to result in jeopardy to the species, there may be a few instances where section 7 consultation would be triggered only if critical habitat is designated, such as occupied habitat that may become unoccupied in the future. There may also be some educational or informational benefits to designating critical habitat. Therefore, at least in areas where opportunity for public access is limited, we find that critical habitat is prudent for Blackburn's sphinx moth.

However, we cannot propose critical habitat designation for this species at this time. The Service's Hawaiian field office, which would have the lead for such a proposal, is in the process of complying with the court order in *Conservation Council for Hawaii v. Babbitt*, Civ. No. 97-00098 ACK (D. Haw. Mar. 9 and Aug. 10, 1998). In that case, the United States District Court for the District of Hawaii remanded to the Service its "not prudent" findings on critical habitat designation for 245 species of Hawaiian plants. The court ordered the Service not only to reconsider these findings, but also to designate critical habitat for any species for which we determine on remand that critical habitat designation is prudent.

Proposed designations or non-designations for 100 species are to be published by November 30, 2000. Proposed designation or non-designations for the remaining 145 species are to be published by April 30, 2002. Final designations or non-designations are to be published within one year of each proposal. Compliance with this court order is a huge undertaking involving critical habitat determinations for over one-fifth of all species that have ever been listed under the ESA, and over one-third of all listed plant species. In addition, the Service has agreed to include in this effort critical habitat designations for an additional 10 plants that are subject of another lawsuit. See *Conservation Council for Hawaii v. Babbitt*, Civ. No. 99-00283 HG. The Service cannot develop proposed critical habitat designation for this species without significant disruption of intensive efforts to comply with the *Conservation Council for Hawaii v. Babbitt* remand.

To attempt to do so could also affect the listing program Region-wide. Administratively, the Service is divided into seven geographic regions. This species is under the jurisdiction of Region 1, which includes California, Oregon, Washington, Idaho, Nevada, Hawaii and other Pacific Islands. About one-half of all listed species occur in Region 1. Region 1 receives, by far, the largest share of listing funds of any Service region because it has the heaviest listing workload. Region 1 must also expend its listing resources to comply with existing court orders or settlement agreements. In fact, in the last fiscal year, all of the Region's funding allocation for critical habitat actions were extended to comply with court orders. If the Service were to immediately prepare a proposed critical habitat designation for this species, notwithstanding the court order pertaining to 245 Hawaiian plant species, efforts to provide protection to many other species that are not yet listed would be delayed. While we believe there may be some benefits to designating critical habitat for this species, these benefits are significantly fewer in comparison to the benefits of listing a species under the ESA because, as discussed above, the primary regulatory effect of critical habitat is limited to the section 7 requirement that Federal agencies refrain from taking any action that destroys or adversely modifies critical habitat.

For these reasons, deferral of a proposal to designate critical habitat will allow us to concentrate our limited resources on higher priority critical habitat and other listing actions, while

allowing us to provide the basic protections under the ESA for this species. We will develop a proposal to designate critical habitat for this species as soon as feasible.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. Hawaii's Endangered Species Act states that, "Any species of aquatic life, wildlife, or land plant that has been determined to be an endangered species pursuant to the (Federal) Endangered Species Act shall be deemed to be an endangered species under the provisions of this chapter." (Hawaii Revised Statutes (HRS), sect. 195D-4(a)). Therefore, Federal listing automatically invokes listing under Hawaii State Law, which prohibits taking of listed wildlife in the State and encourages conservation by State agencies (HRS, sect. 195D-4 and 5). The Endangered Species Act provides for possible land acquisition and cooperation with the State and requires that recovery plans be developed for all listed species. The protection required of Federal agencies and the prohibitions against certain activities involving listed animals 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. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402. Section 7(a)(2) of the Act requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to 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 us. Federal agency actions that may require conference and/or consultation include military training of the Hawaii National Guard on State land near the first Maui site, and unexploded ordnance cleanup that is funded by the U.S. Navy near the Kahoolawe population on State land.

Federally supported activities that could affect Blackburn's sphinx moth and its habitat in the future include, but are not limited to, the following: release

or augmentation of biological control agents; road and firebreak construction; troop movements; removal of unexploded ordnance; and fire resulting from the use of live ammunition.

Conservation of this moth is consistent with most ongoing operations at the occupied sites; however, listing of the species may entail consultation in regard to activities taking place on military lands, or insect pest control operations in Hawaii supported by Federal agencies.

The Act and its implementing regulations found at 50 CFR 17.21, 17.22, and 17.23 set forth a series of general trade prohibitions and exceptions that apply to all endangered wildlife. With respect to animal species listed as endangered, all trade prohibitions of section 9(a)(1) of the Act, implemented by 50 CFR 17.21, apply. These prohibitions, in part, make it illegal with respect to any endangered animal for any person subject to the jurisdiction of the United States to import or export; transport in interstate or foreign commerce in the course of a commercial activity; sell or offer for sale in interstate or foreign commerce; or take (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect—or attempt any of these). Certain exceptions apply to our agents and State conservation agencies. The Act and 50 CFR 17.22 and 17.23 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered animal species under certain circumstances. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and for incidental take in connection with otherwise lawful activities.

It is our policy, 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. We believe that, based on the best available information, the following actions will not result in a violation of section 9:

(1) Possession, delivery, or movement, including interstate transport and import into or export from the United States, involving no commercial activity of dead specimens of this taxon that were collected prior to the date of publication in the **Federal Register** of this final rule;

(2) Activities authorized, funded, or carried out by Federal agencies when

such activity is conducted in accordance with any reasonable and prudent measures given by the Service in a consultation conducted under section 7 of the Act, and;

(3) Activities on private lands that do not result in the take of Blackburn's sphinx moth, and do not require Federal authorization and/or involve Federal funding.

Potential activities involving Blackburn's sphinx moth that we believe will likely be considered a violation of section 9 include, but are not limited to, the following:

(1) Collection of specimens of this taxon for private possession, or deposition in an institutional collection without a proper permit;

(2) Sale or purchase of specimens of this taxon, except for properly documented antique specimens of this taxon at least 100 years old, as defined by section 10(h)(1) of the Act;

(3) Use of pesticides/herbicides in violation of label restrictions resulting in take of Blackburn's sphinx moth;

(4) Unauthorized release of biological control agents that attack any life stage of this taxon, and;

(5) Removal or destruction of the native host plant, defined as any species in the genus *Nothocestrum*, within areas occupied by this taxon that results in harm to the Blackburn's sphinx moth. Regulations at 50 CFR 17.3 defines "harm" in the definition of take as an act that actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species 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 connection with otherwise lawful activities.

Questions regarding whether specific activities will constitute a violation of section 9 of the Act should be directed to the Pacific Islands Manager (see **ADDRESSES** section). 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, Endangered Species Permits, 911 N.E. 11th Avenue, Portland, Oregon, 97232-4181 (telephone: 503/231-6241; facsimile 503/231-6243).

National Environmental Policy Act

We have 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 Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Paperwork Reduction Act

This rule does not contain any collection of information for which Office of Management and Budget (OMB) approval under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* is required. An information collection related to the rule pertaining to permits for endangered and threatened species has OMB approval and is assigned clearance number 1018-0094. For additional information concerning permits and associated requirements for endangered and threatened wildlife, see 50 CFR 17.22 and 17.23.

References Cited

A complete list of all references cited in this document, as well as others, is available upon request from the Pacific Islands Ecoregion Office (see **ADDRESSES** section).

Author

The primary authors of this final rule are Dr. Adam Asquith, U.S. Fish and Wildlife Service, Kauai National Wildlife Refuge Complex, P.O. Box 1128, Kilauea, Hawaii 96754, (808/828-1413), and Dr. Annie Marshall, Ecological Services, Pacific Islands Ecoregion Office (see **ADDRESSES** section) (808/541-3441).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, 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.
PART='17'≤

2. Amend section 17.11(h) by adding
the following, in alphabetical order

under INSECTS, to the List of
Endangered and Threatened Wildlife:

**§ 17.11 Endangered and threatened
wildlife.**

* * * * *
(h) * * *

Species							
Common name	Scientific name	Historic range	Vertebrate popu- lation where endan- gered or threatened	Status	When listed	Critical habi- tat	Special rule
INSECTS							
* Blackburn's sphinx moth.	* Manduca blackburni	* U.S.A. (HI)	* NA	* E	* 682	* NA	* NA
*	*	*	*	*	*	*	*

Dated: January 20, 2000.

Jamie Rappaport Clark,

Director, U.S. Fish and Wildlife Service.

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