

Clause at 48 CFR Chap-ter 9 (DEAR)	Change the date in the parentheses following the clause title from	to read
970.5204-12	(APR 1984)	(JUL 1994)
970.5204-15	(SEP 1991)	(APR 1994)
970.5204-16	(JAN 1991)	(JUL 1991)
970.5204-17	(JUNE 1988)	(JAN 1996)
970.5204-18	(JUL 1991)	(APR 1994)
970.5204-20	(JAN 1992)	(AUG 1993)
970.5204-21	(APR 1984)	(OCT 1995)
970.5204-24	(APR 1984)	(OCT 1995)
970.5204-26	(APR 1984)	(SEP 1991)
970.5204-31	(JUL 1991)	(APR 1994)
970.5204-33(a) and (b) [two places].	(JUNE 1987)	(APR 1994)
970.5204-35	(APR 1984)	(JUL 1994)
970.5204-38	(APR 1984)	(APR 1994)
970.5204-41	(APR 1984)	(APR 1994)
970.5204-43	(APR 1984)	(APR 1994)
970.5204-45	(APR 1984)	(OCT 1995)
970.5204-54	(JUL 1991)	(APR 1994)
970.5204-55	(JUL 1991)	(APR 1994)
970.5204-56	(JUL 1991)	(APR 1994)
970.5204-57	(AUG 1992)	(APR 1994)
970.5204-61	(DEC 1993)	(APR 1994)

970.5204-23 [Amended]

23. Subsection 970.5204-23 is amended in the introductory sentence by revising "970.2902" to read "970.2903".

970.5204-32 [Amended]

24. In subsection 970.5204-32 paragraphs (a) and (b) are amended by revising the introductory text and adding a heading immediately before the clause text to read as follows:

(a) In contracts with nonprofit contractors use the following clause:

Required Bond and Insurance—Exclusive of Government Property (Nonprofit) (APR 1994)

* * * * *

(b) In contracts with profit making contractors use the following clause:

Required Bond and Insurance—Exclusive of Government Property (Profit Making) (APR 1994)

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970.5204-44 [Amended]

25. Subsection 970.5204-44, Flowdown of contract requirements to subcontracts, is amended by revising the date following the clause title to read "(FEB 1997)" and in clause paragraph (b)(11) "40 CFR part 60" is revised to read "41 CFR part 60."

970.5204-50 [Removed and Reserved]

26. Subsection 970.5204-50, Cost and schedule control systems, is removed and reserved.

27. Subsection 970.5204-52 is revised to read as follows:

970.5204-52 Foreign travel.

When foreign travel may be required under the contract, insert the clause at 952.247-70.

970.5204-60 [Amended]

28. Subsection 970.5204-60, Facilities management, is amended by revising the date "August 30, 1993" following the clause title to read "(FEB 1997)" and by deleting clause paragraphs (c), Maintenance Management, and (e), Capital Assets Management. Paragraphs (d), Energy Management, and (f), Subcontract Requirements, are redesignated as paragraphs (c) and (d), respectively.

970.7105 [Amended]

29. Section 970.7105, Purchasing from contractor affiliated sources, is amended in paragraph (a)(3) by deleting the parenthetical reference "(See 970.7101(c))".

[FR Doc. 97-938 Filed 1-15-97; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AC84

Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Fish and Wildlife Service (Service) determines the Laguna Mountains skipper (*Pyrgus ruralis lagunae*) and quino checkerspot butterfly (*Euphydryas editha quino*) to be endangered species throughout their respective ranges in southwestern California and northwestern Baja California, Mexico, pursuant to the Endangered Species Act of 1973, as amended (Act). The Laguna Mountains skipper occupies montane meadow habitats in a very restricted range within San Diego County, California. The quino checkerspot is locally distributed in sunny openings within chaparral and coastal sage shrublands in portions of Riverside and San Diego counties, California, and northwestern Baja California, Mexico. These taxa are threatened by one or more of the following factors—loss and degradation and fragmentation of habitat due to grazing, urban development, and fire

management practices; over-collection and other human disturbance; and naturally occurring events such as fire or weather extremes. This rule implements Federal protection provided by the Act for the Laguna Mountains skipper and quino checkerspot butterflies.

EFFECTIVE DATE: January 16, 1997.

ADDRESSES: The complete file for this rule is available for public inspection, by appointment, during normal business hours at the Carlsbad Field Office, U.S. Fish and Wildlife Service, 2730 Loker Avenue West, Carlsbad, California 92008.

FOR FURTHER INFORMATION CONTACT: Ms. Marjorie Nelson, Biologist, at the above address (telephone 619/431-9440).

SUPPLEMENTARY INFORMATION:

Background

The Laguna Mountains skipper (*Pyrgus ruralis lagunae*) is a small butterfly in the skipper family (Hesperiidae). It has a wingspan of about 3 centimeters (cm) (1 inch (in.)) and is distinguished from the rural skipper (*P. ruralis ruralis*) by extensive white wing markings that give adults, particularly males, an overall appearance of white rather than mostly black, and by the banding patterns on the hind wings (Scott 1981, Levy 1994). The Laguna Mountains skipper is found in montane meadow habitats.

The Laguna Mountains skipper is one of two recognized subspecies of the rural skipper, *Pyrgus ruralis*. Scott (1981) described *P. ruralis lagunae* from a collection made in 1956 by F. Thorne in the Laguna Mountains of San Diego County, California, based upon population isolation and color differentiation. The Laguna Mountains skipper is restricted to the Laguna Mountains and Mount Palomar in San Diego County. The other subspecies of the rural skipper (*P. ruralis ruralis*) ranges from the mountains of British Columbia and Alberta, Canada, south to the coast ranges and Sierra Nevada of central California, as well as Nevada, Utah, and northern Colorado (Stanford and Opler 1993; John Brown, Dudek and Associates, *in litt.*, 1992) and has darker wings than the Laguna Mountains skipper.

Three other species in the genus *Pyrgus* occur in San Diego County: the common checkered skipper (*P. communis*), the small checkered skipper (*P. scriptura*), and the western checkered skipper (*P. albescens*). The Laguna Mountains skipper can be distinguished from all three of these species by the whitish appearance of the adults and the use of a single larval host

plant, *Horkelia clevelandii* (Cleveland's horkelia), in the rose family (Rosaceae) (Garth and Tilden 1986, Scott 1986). In addition, the western checkered skipper and southern California populations of the small checkered skipper are restricted to desert areas (Garth and Tilden 1986).

The Laguna Mountains skipper population in the Laguna Mountains in San Diego County (J. Brown, *in litt.*, 1992) was not seen during a relatively extensive survey in 1994 (Levy 1994) but was seen in 1995 (Jack Levy, pers. comm., 1995). Prior to that observation, it was last seen in the Laguna Mountains in 1986 occupying a small area along a fence in a U.S. Forest Service (USFS) campground (Levy 1994; Murphy 1990; D. Hogan, San Diego Biodiversity Project, pers. comm., 1993;). The Laguna Mountains population was estimated to consist of fewer than 100 individuals (Murphy 1990; Brown 1991; J. Brown, *in litt.*, 1992).

The Laguna Mountains skipper is currently found at four sites in the Mount Palomar region of San Diego County (Levy 1994). It was detected and collected on Mount Palomar in 1991 by D. Lindsley (J. Brown, *in litt.*, 1992; J. Brown, pers. comm., 1993). Two additional populations were located in 1994 (Levy 1994). The largest of the Mount Palomar populations is estimated to comprise 240 individuals (Levy 1994).

Horkelia clevelandii is the larval host plant of the Laguna Mountains skipper. This plant occurs in meadows, under pines, and on granite in the Laguna, Cuyamaca, Palomar, and San Jacinto Mountains of southwestern California and northwestern Baja California, Mexico, from 1,200 to 2,500 meters (m) (4,000 to 8,000 feet (ft)) in elevation (Hickman 1993). Although the distribution of a butterfly is primarily defined by the presence of its larval host plant, the butterfly may be further restricted by other physiological or ecological constraints. The Laguna Mountains skipper is currently found in a few open meadows of yellow pine forest between 1,200 and 2,000 m (4,000 and 6,000 ft) in elevation. Historically, this skipper may have occurred throughout the higher elevations of San Diego County (Murphy 1990; Brown 1991; J. Brown, *in litt.*, 1992). Murphy (1990) reported that there were at least six populations of this taxon in the Laguna Mountains in the 1950's and 1960's; however, current information indicates only one extant population. Until its rediscovery in 1983 by J. Emmel and subsequent sightings in 1986 and 1995, this skipper had not

been seen in the Laguna Mountains since 1972 (J. Brown, *in litt.*, 1992).

Historically, the Mount Palomar populations were small compared to the populations in the Laguna Mountains. Only five specimens have been collected from Mount Palomar in this century (J. Brown, *in litt.*, 1992). Prior to specimens collected in 1991 and the additional populations found in 1994, the last known sightings from Mount Palomar were from 1980 and, prior to that, from 1939 (Brown 1991; Levy 1994; J. Brown, *in litt.*, 1992).

The Laguna Mountains skipper is apparently bivoltine (two generations per year). The adult flight season occurs from April to May with a second smaller flight in late June to late July (Brown 1991, Levy 1994). The Laguna Mountains skipper may have evolved a unique mechanism for coping with the low daytime temperatures it encounters during its spring flight, which is unusually early for butterflies in the Laguna Mountains (Brown 1991). It is assumed that the life history of the Laguna Mountains skipper is similar to that of the nominate subspecies (*Pyrgus ruralis ruralis*), which diapauses (maintains a state of suspended activity) as a full grown larva and lives 10 to 20 days in the adult stage (J. Brown, *in litt.*, 1992).

The quino checkerspot, *Euphydryas* (= *Occidryas*) *editha quino* is a small member of the brush-footed butterfly family (Nymphalidae). It has about a 3 cm (1 in.) wingspan and is checkered with dark brown, reddish, and yellowish spots. It is one of 12 recognized subspecies of *E. editha* (*editha* checkerspot) (Miller and Brown 1981, Ferris 1989). The quino checkerspot can be distinguished from other subspecies of *E. editha* in that the quino checkerspot tends to be larger with redder wings, and the light spots on the wings tend to be fewer and more discrete (Garth and Tilden 1986). This taxon also looks similar to two other species of butterfly that occur within its range. The Chalcedon checkerspot (*E. chalcedona*) is yellow and slightly larger, with sharper forewings, than the quino checkerspot. Gabb's checkerspot (*Chlosyne gabbii*) is smaller than the quino checkerspot and has orange rather than red markings (Orsak 1977).

The quino checkerspot was first described in 1863 by Hans Herman Behr, an entomologist with the California Academy of Sciences in San Francisco, as *Melitaea quino*, based on a specimen from coastal San Diego County. It was subsequently recognized by Comstock (1927) as a full species of the genus *Euphydryas*. *Euphydryas editha quino* was then inappropriately

identified as *E. e. wrightii*, thereby confusing it with earlier taxonomic treatments of the desert checkerspot, *E. chalcedona hennei* (formerly ssp. *quino*) (Scott 1981). This error was rectified by J. Emmel, based on a study of Behr's notes and available specimens (Allen 1990; Dennis Murphy, Stanford University, *in litt.*, 1988). The genus *Euphydryas* is also referred to as *Occidryas*, but most authors retain the former name (Scott 1986, Harrison *et al.* 1988, Murphy 1990, Brown 1991).

Adult quino checkerspot butterflies live from 4 to 8 weeks. The flight season occurs from mid-January to late April and peaks between March and April. The eggs hatch in about 10 days and the larvae begin to feed immediately. Fourth instar (development stage) larvae enter an obligatory diapause as summer approaches and their larval food plant dries up. Extended periods of diapause may occur during times of drought (Greg Ballmer, University of California at Riverside, *in litt.*, 1990). Post-diapause larvae develop through four more instars and then pupate to emerge as adults in the early spring (Murphy and White 1984).

The quino checkerspot is restricted to open grassland and sunny openings within shrubland habitats of the interior foothills of southwestern California and northwestern Baja California, Mexico (G. Ballmer, *in litt.*, 1991). Like the Laguna Mountains skipper, its distribution is defined primarily by that of its larval host plant. The primary larval food plant of the quino checkerspot is *Plantago erecta* (dwarf plantain) in the plantain family (*Plantaginaceae*). However, the larvae may also use *Plantago ovata* and *Castilleja exserta* (owl's-clover in the figwort family (*Scrophulariaceae*)) (White 1974; G. Ballmer, pers. comm., 1993). These plants grow in or near meadows, vernal pools, and lake margins, and spread to upland shrub communities of sparse chaparral and coastal sage scrub. This butterfly is generally found at sites where high densities of the host plants occur (J. Johnson, *in litt.*, 1989; David Hawks, University of California at Riverside, *in litt.*, 1992) and at a variety of elevations from about sea level to about 900 m (3,000 ft). Within these areas, the quino checkerspot may be preferentially selecting sites where exposure to winter sun is greatest (Weiss *et al.* 1987, Allen 1990). These habitats, like the quino checkerspot, were once common along coastal bluffs, mesas, and inland foothills (Brown and Faulkner 1984).

The quino checkerspot may have been one of the most abundant butterflies in San Diego, Orange, and western

Riverside counties during the early part of the 20th century (Murphy 1990). The original range of the quino checkerspot extended as far south as Valle de la Trinidad in northwestern Baja California, Mexico (Brown *et al.* 1992) and as far north as Point Dume in Los Angeles County (Allen 1990). Currently, only seven or eight populations are known within the United States (the lack of an exact count is due to uncertainty as to whether sightings of very small numbers of butterflies in two areas represent one or two populations). All known extant populations in the United States occur in southwestern Riverside and north-central San Diego counties (G. Ballmer, *in litt.*, 1990 and 1991, pers. comm., 1994; D. Hawks, pers. comm., 1993; Marjorie Nelson, U.S. Fish and Wildlife Service (USFWS), pers. obs., 1994). One population near Upper Otay Lake in San Diego County (D. Murphy, *in litt.*, 1991) was last seen in 1990. In 1996, a very small group of quino checkerspots was sighted on Otay Mesa, but because of the very limited amount of available host plant, this occurrence is not expected to persist beyond 1996 (J. Brown, pers. comm., 1996). At least one population exists in Mexico, in the Sierra Juarez near Tecate (Brown 1991; D. Murphy, *in litt.*, 1991). Although no estimates of population sizes for the quino checkerspot are currently available, all but three populations are known to comprise fewer than five individuals.

Previous Federal Action

On June 3, 1991, the Service received a petition dated May 27, 1991, from Mr. David Hogan of the San Diego Biodiversity Project to list four butterfly taxa as endangered under the Act—the Laguna Mountains skipper (*Pyrgus ruralis lagunae*), Hermes copper (*Lycaena hermes*), Thorne's hairstreak (*Mitoura thornei*), and Harbison's dun skipper (*Euphyes vestris harbisoni*). The petition cited loss and degradation of habitat, through various causes, as the major threat to these butterflies. On July 12, 1993, the Service found that the petition contained substantial information indicating that the requested action may be warranted for the Laguna Mountains skipper, but not for the other three butterflies. The latter finding was made because sufficient information was not available regarding the threats to, and biological vulnerability of, those taxa. An announcement of these findings was published in the Federal Register on July 19, 1993 (58 FR 38549).

On September 30, 1988, the Service received a petition dated September 26,

1988, from Dr. Dennis Murphy of the Stanford University Center for Conservation Biology, to list the quino checkerspot butterfly (*Euphydryas editha quino*) as endangered under the Act. At the time the petition was submitted, this taxon had not been seen for several years and was thought to be extinct. Extant populations of the quino checkerspot were reported by Dr. Murphy in a letter dated August 1, 1991, which again requested the Service to consider the petitioned action. The status of the quino checkerspot has been under review by the Service since 1984 (May 22, 1984; 50 FR 37958) and it was classified as a candidate on November 21, 1991 (56 FR 58804), meaning that information in the Service's possession was sufficient to support a proposal to list it as endangered or threatened.

The proposed rule for these two taxa constituted the following findings—the final 12-month finding for the Laguna Mountains skipper that the petitioned action is warranted; the 90-day finding that the petition for the quino checkerspot butterfly presented substantial information that the action may be warranted; and the final 12-month finding for the quino checkerspot that the petitioned action is warranted. The proposed rule was published in the Federal Register on August 4, 1994 (59 FR 39868).

The processing of this final rule conforms with the Service's listing priority guidance published in the Federal Register on December 5, 1996 (61 FR 64475). The guidance clarifies the order in which the Service will process rulemakings following two related events: 1) the lifting, on April 26, 1996, of the moratorium on final listings imposed on April 10, 1995 (Public Law 104-6), and 2) the restoration of significant funding for listing through passage of the omnibus budget reconciliation law on April 26, 1996, following severe funding constraints imposed by a number of continuing resolutions between November 1995 and April 1996. The guidance calls for giving highest priority to handling emergency situations (Tier 1) and second highest priority (Tier 2) to resolving the listing status of the outstanding proposed listings. This final rule falls under Tier 2. At this time there are no pending Tier 1 actions. This rule has been updated to reflect any changes in distribution, status and threats since the effective date of the listing moratorium. This additional information was not of a nature to alter the Service's decision to list the species.

Summary of Comments and Recommendations

In the August 4, 1994, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule for the two butterfly taxa considered in this rule. Appropriate Federal and State agencies, county governments, scientific organizations and authorities, and other interested parties were contacted and requested to comment. A notice announcing a public hearing and extension of the public comment period was published in the Federal Register on September 26, 1994 (59 FR 49045). Newspaper notices inviting public comment were published in the following newspapers: *San Diego Union-Tribune*, *Orange County Register*, and *Riverside County Press-Enterprise*.

A public hearing was held in Rancho Bernardo, California, on October 19, 1994, in conjunction with two other proposals to list three taxa (San Diego fairy shrimp, Cuyamaca Lake downingia, and Parish's meadowfoam), and the comment period was extended to October 31, 1994, to accommodate additional comments. The transcript from this hearing is available for inspection (see ADDRESSES section).

The Service has reviewed the written and oral statements from the hearing and received during the comment period. A total of 21 commenters (from 2 Federal entities and 19 organizations or individuals) submitted 33 comments. Thirty of the comments were either not relevant to this listing action or non-substantive. The remaining comments provided additional information and/or were substantive comments. Two commenters submitted additional information, much of which has been incorporated into this final rule. The issues raised by the other commenters are presented here. Issues of a similar nature were grouped from the comments received and are addressed below.

Issue 1

Several commenters stated that the listing of these butterflies as endangered should be postponed until local multi-species planning efforts are completed. They stated that these actions will eliminate the need for listing by adequately providing for conservation while also permitting economic growth. Another commenter asserted that San Diego County multi-species efforts do not adequately cover the taxa in this rule.

Service Response: Current regional multi-species planning efforts do not

provide sufficient protection for either taxon to preclude their listing under the Act. The Laguna Mountains skipper is not now covered by, nor currently being considered for inclusion in, any local multi-species plan because its distribution lies outside ongoing regional planning areas.

In 1991, the State of California established the Natural Communities Conservation Plan (NCCP) program to address conservation needs throughout the State. The focus of current planning programs is the coastal sage scrub community in southern California, although other vegetation communities are being addressed in an ecosystem-level approach. The NCCP for the Central and Coastal Subregion of Orange County, signed into agreement on July 17, 1996, currently identifies the quino checkerspot as a "conditionally covered species;" however, the butterfly is not currently known to be extant within the planning area. The species coverage under the plan is conditional because quino checkerspot surveys have not been conducted within the planning area and newly discovered populations may have long-term conservation value. If quino checkerspots are found within the Central and Coastal Subregion of Orange County, participating landowners are permitted to "take" quino checkerspots, incidental to otherwise lawful activities, that occur in small and/or satellite populations, reintroduced populations, or populations that have expanded due to reserve system management. To offset any such take, a mitigation plan to be developed in coordination with the Service, California Department of Fish and Game (CDFG), and a non-profit corporation will oversee management of the subregional reserve system. That mitigation plan would (1) minimize impacts and provide appropriate feasible protection for the quino checkerspot, (2) provide for habitat restoration/enhancement for the butterfly; and (3) provide for monitoring and adaptive management of quino checkerspots and their habitat within the reserve system. No "take" is authorized under the permit for those populations that are considered to be essential to the butterfly's conservation.

Other planning efforts do not address the quino checkerspot, or may include the butterfly but have not been completed. The quino checkerspot may be addressed by a planning effort underway in southern Orange County; however, the target species list has not yet been determined. San Diego's Draft Multi-species Conservation Plan (MSCP) does not include quino checkerspot as a covered species because the risk of

impacts is unknown and the plan cannot assure protection for this species. A small group of quino checkerspot was sighted in 1996 on Otay Mesa within the MSCP planning area; however, because the amount of host plant available to this population is very low, this population is not expected to persist to 1997 (J. Brown, and M. Singer, pers. comms., 1996). The north-central San Diego County site is not included in any multi-species planning efforts. Only one of the Riverside County quino checkerspot populations occurs within the core reserve areas designated in the approved Stephens' Kangaroo Rat Habitat Conservation Plan (RCHCA 1995). The quino checkerspot apparently will be considered in the western Riverside County multi-species planning effort; however, this plan has not yet been prepared, funded, or approved for implementation.

The Service does not presently have reasonable evidence that conservation plans being implemented or developed will adequately conserve either butterfly within their historic ranges. These taxa would receive no legal protection while plans are being developed. For reasons explained under "Summary of Factors Affecting the Species" below, sufficient threats remain for the Service to justify a listing action.

Issue 2

Two commenters submitted information on three additional populations of Laguna Mountains skipper at Mount Palomar and speculated that the Laguna Mountains skipper has been extirpated from the Laguna Mountains.

Service Response: The Service acknowledges the efforts by the commenters to further determine the distribution and abundance of the Laguna Mountains skipper. The information submitted was used in the "Background" section above and the following "Summary of Factors Affecting the Species." The Service has determined that, although additional populations have been found, the Laguna Mountains skipper is still an extremely rare butterfly threatened by a number of complex factors. As demonstrated by the sightings in 1995, this butterfly is not completely extirpated from the Laguna Mountains. However, failure to locate the taxon in the Laguna Mountains during extensive 1994 survey efforts by Levy indicates extremely low population numbers.

Issue 3

One commenter questioned the extent to which livestock grazing is the main

reason for decline of the Laguna Mountains skipper, since the intensity of grazing on public lands has been reduced.

Service Response: Based on information provided by the petitioner and obtained from lepidopterists, *Horkelia clevelandii* plants are stunted in areas that are grazed. As noted by Levy (1994), *Horkelia* is an important nectar source and the loss of flowers to grazing would impact the reproductive success of adult Laguna Mountains skippers. The decline of the Laguna Mountains skipper has occurred over a number of decades, with much of the decrease occurring prior to acquisition of the land by a Federal agency. Additionally, as is stated in the "Background" section, butterflies are frequently more restricted than their larval host plant due to other ecological requirements. Given these considerations and the extreme rarity of this taxon, any incidental trampling or predation by cattle could significantly impact the taxon.

Issue 4

One commenter stated that there are more areas of *Horkelia* that are not grazed than was stated in the proposed rule.

Service Response: The information submitted by the commenter was incorporated into the "Background" and "Summary of Factors Affecting the Species." Subsequent to an analysis of the relevant maps provided by a commenter, the Service concludes that the majority of *Horkelia clevelandii* within the range of the Laguna Mountains skipper appears to be grazed. In addition, the Service concludes that the areas currently not subject to grazing were nonetheless previously grazed.

Issue 5

Two commenters stated that the Laguna Mountains skipper has an ecological need for habitat disturbance. Historically, this disturbance may have been due to a periodic fire regime. However, one of the commenters maintained that grazing represents a substitute for that fire disturbance.

Service Response: Livestock grazing does not replicate the type of disturbance that a fire would bring. Highly managed livestock grazing may be adequate to maintain populations of the host plant, *Horkelia clevelandii*; however, this plant is also a preferred fodder for livestock (Levy 1994). Additionally, the Laguna Mountains skipper is currently found in five areas, only two of which are grazed. The largest grazed habitat occupied by skippers is on both private and public

land, but the intensity of grazing has been reduced on the public land. Another population is in a campground where habitat extends onto a grazing allotment; the pasture closest to the campground is grazed one month per year. A third population is found in a finger of a meadow, across a road from, but not in, the grazed portion of the meadow.

Grazing as a management tool for butterflies must be carefully assessed and monitored for each butterfly species and a general statement cannot be made regarding its effectiveness as a substitute for fire. It is conceivable that if the numbers of Laguna Mountains skipper were higher, there would be a greater tolerance for certain schedules and intensities of livestock grazing. However, because the taxon's numbers are currently extremely low, the impacts of trampling and incidental predation from livestock grazing would likely be significant. Currently there is no empirical evidence that the Laguna Mountains skipper can tolerate grazing.

The Service solicited the expert opinions of seven appropriate and independent specialists regarding pertinent scientific or commercial data and assumptions relating to the taxonomy and biological and ecological information for these two taxa. The response received provided additional data that have been incorporated into this final rule.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that the Laguna Mountains skipper (*Pyrgus ruralis lagunae* J. Scott) and quino checkerspot butterfly (*Euphydryas editha quino* Behr) should be classified as endangered species. Procedures found at section 4 of the Endangered Species Act (16 U.S.C. 1531) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. 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 Laguna Mountains skipper and the quino checkerspot are as follows.

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

The habitats and the ranges of the two taxa listed in this rule have been substantially reduced by urban and agricultural development and recreational activities, and are further

threatened with destruction, modification, and curtailment. The Laguna Mountains skipper and the quino checkerspot currently occur within very restricted ranges and are extremely localized in their present distributions. The habitat requirements for these two animals are primarily defined by their larval host plants. The removal or degradation of these plants, as well as that of nectar sources for adults, leads to the elimination of the affected population.

In the case of the Laguna Mountains skipper, *Horkelia clevelandii* is itself a rare species and is only found in the Laguna, Cuyamaca, and San Jacinto Mountains of southwestern California, and in northwestern Baja California, Mexico (Hickman 1993). Historic habitat destruction and degradation from overgrazing and trampling of *H. clevelandii* by domestic cattle is considered to be the primary factor responsible for its decline (Murphy 1990; D. Hogan, *in litt.*, 1991; J. Brown, *in litt.*, 1992).

Currently three of the five localities of Laguna Mountains skipper are not subject to livestock grazing. The fourth population occurs in the Laguna Mountains, in a campground area of the Cleveland National Forest bordering a grazing allotment (Murphy 1990; D. Hogan, pers. comm., 1993). The fifth is on a grazing allotment, with habitat that extends onto private lands. Although the magnitude of livestock grazing on this allotment has been reduced, any impacts from grazing would likely have a significant effect on the taxon due to the small numbers of Laguna Mountains skippers.

If there were greater numbers of individuals and more populations, the Laguna Mountains skipper might be able to tolerate certain levels and timing of livestock grazing. However, given the low numbers of this butterfly, any impacts to its habitat would be significant. The grizzled skipper (*Pyrgus malvae*) in England is able to tolerate grazing at a highly managed level (Levy 1994). The rare Dakota skipper (*Hesperia dacotae*) is sensitive to even light grazing (Royer and Marrone 1992, Moffat and McPhillips 1993). Some species of butterflies have habitat requirements that need a managed grazing scheme whereas others have habitat that recovers with reduced grazing. However, previous studies indicate that the use of grazing as a management tool for butterflies must be done carefully and at low intensities (Kulfan 1990, Thomas *et al.* 1992, Moffat and McPhillips 1993, Thomas and Jones 1993). A grazing plan for

management of the Laguna Mountains skipper has yet to be developed.

Fifty to seventy-five percent of the known range of the quino checkerspot has been lost since 1900 due to habitat degradation or destruction (Brown 1991). Sunny openings within chaparral and coastal sage scrub occupied by the quino checkerspot have been degraded by grazing and, to a lesser degree, destroyed by urban development. The primary larval food plant, *Plantago erecta*, can be displaced by exotic plants that invade once the ground is disturbed by discing, grading, and/or grazing (J. Johnson, *in litt.*, 1989; G. Ballmer, *in litt.*, 1990). The host plant then recolonizes in sites where grasses do not grow well, like cattle trails and road edges, where quino checkerspot larvae are subject to trampling (D. Hawks, pers. comm., 1993).

The encroachment of urban development in rural Riverside County potentially threatens two of the largest populations of quino checkerspot. This area is growing rapidly and is projected to be fully developed within the decade (Monroe *et al.* 1992). One population is in an area that is included in a local community plan that provides for subdivision of parcels into 9-hectare (ha) (20-acre (ac)) lots (M. Freitas, *in litt.*, 1993). Another population is on the site of an approved preliminary map for a housing development. The loss of these two populations is likely to preclude survival and recovery of the taxon.

The quino checkerspot population in southern San Diego County may be threatened by a proposed urban development project on Otay Mesa. The preferred alternative for the Otay Ranch New Town Plan (the largest planned community in the southwestern U.S.) would result in the loss of 5,600 ha (14,000 ac) of upland shrub communities, or about 52 percent of the extent of the plant communities within the project area. The effects of this project on the recently observed quino checkerspot population on Otay Mesa are not known at this time but are likely to be significant.

Additional development is expected to further reduce and degrade habitat of the quino checkerspot through construction of homes and roads, and increases in fire frequencies, unauthorized trash dumping, and the distribution and abundance of exotic plants. An existing recreational vehicle park and marina in the vicinity of quino checkerspot habitat attracts unauthorized use of off-road vehicles (ORV's) within natural habitat areas. ORV's increase erosion and fire hazards and destroy habitat by creating trails.

Evidence of ORV use is apparent at one of the quino checkerspot localities, where a recently created dirt road bisects the center of the habitat (G. Ballmer, *in litt.*, 1991). Quino checkerspot habitat at this locality has also been disced in part; these disturbed areas no longer support this taxon, while the surrounding undisturbed areas do (G. Ballmer, *in litt.*, 1991).

Bureau of Land Management (BLM)-administered lands and USFS Wilderness Areas are currently contiguous with some privately owned quino checkerspot habitat. As Riverside County becomes more densely populated, and these privately owned parcels are developed, fragmentation and degradation of this contiguous habitat is expected.

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

Over-collection is a potential threat to both the Laguna Mountains skipper and the quino checkerspot because of their value to butterfly collectors. There is an extensive commercial trade for many imperiled or rare butterflies (Chris Nagano, John Mendoza, and Cindy Schroeder, USFWS, pers. obs., 1992–95). Johnson (*in litt.*, 1989) has noted that as the number of quino checkerspot colonies is reduced, lepidopterists may collect individuals in order to include rare species in their collections and to obtain surplus specimens for exchange or sale to other collectors. The remaining populations of the quino checkerspot and the Laguna Mountains skipper continue to be threatened by over-collection.

In the spring of 1993, populations of the quino checkerspot were the subject of collections for voucher specimens and captive-rearing (D. Hawks, pers. comm., 1993). Although there are no studies of the impact of the removal of individuals on natural populations of either of the butterfly taxa in this rule, related studies of another endangered nymphalid butterfly (Gall 1984a and 1984b) and a lycaenid butterfly (Duffey 1968) suggest that the two taxa in this rule could be adversely affected given the isolation of their apparently small populations. Collecting from small colonies or repeated handling and marking (particularly of females or in years of low abundance) could seriously damage the populations through loss of individuals and genetic variability (Singer and Wedlake 1981, Gall 1984b, Murphy 1988). Collecting females dispersing from a colony can also reduce the probability that new colonies will be founded. Collectors pose a threat because they may be unable to recognize

when they are depleting already substantially reduced butterfly colonies below the thresholds of survival and/or recovery, especially when they lack appropriate biological training or visit the area for a short period of time (Collins and Morris 1985).

An additional significant threat to the survival of both taxa in this rule is the potential for vandalism by landowners who may view the presence of sensitive species as an obstacle to development. The habitat of the largest and densest quino checkerspot population in Riverside County was deliberately disced in 1984 or 1985 to eliminate the population (J. Johnson, *in litt.*, 1989).

C. Disease or Predation

Disease is not known to be a factor affecting the taxa listed in this rule. There are no documented observations of predation on the Laguna Mountains skipper. However, the CDFG has released and is proposing to continue releasing wild turkeys in the Palomar and Descanso Ranger Districts of the Cleveland National Forest for the purposes of recreational hunting. Alternative release sites are within historic Laguna Mountains skipper habitat and upstream from occupied habitat. Wild turkeys feed mostly on wild oats, insects, and acorns. During its first four weeks, 60 to 90 percent of a young turkey's diet consists of animal food, primarily insects. The adult diet consists of 15 to 25 percent animal food and turkeys are known to eat moth larvae (CDFG 1994). The Laguna Mountains skipper is also threatened by incidental predation from livestock grazing. The host plant is palatable to grazers (Levy 1994) and any feeding larvae could be incidentally eaten and/or trampled. This is a significant impact to the low population numbers of the Laguna Mountains skipper.

There is evidence that predation is a threat to the quino checkerspot. Preliminary studies (D. Hawks, pers. comm., 1993; G. Ballmer, pers. comm., 1994) indicate that predation has contributed to the decline of the quino checkerspot at sites where habitat has been invaded by non-native plant species, which may also harbor predatory arthropods. Sites within historical quino checkerspot habitat that have been heavily invaded by Mediterranean plant species also have high sowbug (*Armadillidium* sp. and *Porcellio* sp.) and earwig (*Euborellia annulipes* and *Forficula auricularia*) densities. Sowbugs and earwigs prey upon butterfly eggs. These predators are absent from natural sites currently occupied by the quino checkerspot (D. Hawks, pers. comm., 1993; G. Ballmer,

pers. comm., 1994). Argentine ants (*Iridomyrmex humilis*) are also a potential predator that co-occur with earwigs and sowbugs. The number of these introduced predators is expected to increase with the spread of development because these exotics thrive in irrigated horticultural environments which may be adjacent to natural quino checkerspot habitat.

In general, outbreaks of disease or parasitism are more likely to occur under conditions of high population densities. The Laguna Mountains skipper occurs in low population densities; most populations of the Quino checkerspot also occur at low densities. Although specific parasites are unknown for the Laguna Mountains skipper and the quino checkerspot, Johnson (*in litt.*, 1989) suggests that under certain conditions, parasitism can eliminate a butterfly colony by building the parasite load of a population, thus contributing to the crash of that population. This cycle can only continue if the affected area is recolonized by butterflies, which may be unlikely when the host-butterfly population is small, fragmented, and isolated. However, if alternative parasite hosts exist in areas occupied by the butterflies, populations of parasites can be maintained on those alternative hosts in sufficient numbers to affect butterfly populations.

D. The Inadequacy of Existing Regulatory Mechanisms

Existing regulatory mechanisms that could provide some protection for both the Laguna Mountains skipper and the quino checkerspot include: (1) listing under the California Endangered Species Act; (2) adequate consideration under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA); (3) local laws and regulations; (4) occurrence with other species protected by the Federal Endangered Species Act; and (5) land acquisition and management by Federal, State, or local agencies, or by private groups and organizations for the conservation of these taxa.

Neither of the taxa in this rule is under consideration for listing under the California Endangered Species Act. The CDFG is unable to protect insects under its current regulations (Pete Bontadelli, CDFG, *in litt.*, 1989).

The status of and threats to the Laguna Mountains skipper and the quino checkerspot, as discussed above, reflect the failure of CEQA, NEPA, and local laws and regulations to protect and provide for the conservation of these taxa. Although there are several regional

conservation planning efforts underway within the range of the quino checkerspot, they have either not been completed, approved, funded, or implemented, or they have not provided adequate protection for this taxon.

The Service is not aware of any overlap in distribution between the Laguna Mountains skipper and any State or federally listed animal species. At one or two localities it may overlap with Parish's meadowfoam (*Limnanthes gracilis* ssp. *parishi*), currently proposed for Federal listing as threatened (59 FR 39879). However, the listing of a plant does not afford the same level of protection as the listing of an animal (16 U.S.C. 1538 (a)) and the coincidental protection of the Laguna Mountains skipper would be minimal at best. At some localities, the quino checkerspot co-occurs with the coastal California gnatcatcher (*Polioptila californica californica*), a federally listed threatened species, and Stephens' kangaroo rat (*Dipodomys stephensi*), a federally listed endangered species. However, the habitat requirements for the quino checkerspot are different from either the coastal California gnatcatcher or Stephens' kangaroo rat. Additionally, the Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) for western Riverside County provides protection for only one population of the quino checkerspot (RCHCA 1995). The NCCP/HCP for the Central and Coastal Subregion of Orange County may potentially provide some protection for the quino checkerspot; however, the butterfly is not known to be extant within the planning area and systematic surveys are lacking. The quino checkerspot is not considered adequately conserved by the MSCP in San Diego County.

Some protection is afforded to the Laguna Mountains skipper on USFS land. Considering the small population size and extremely limited distribution of the Laguna Mountains skipper, this protection is insufficient to conserve the taxon. In the case of the quino checkerspot, some protection may be provided to one population by its occurrence, in part, on BLM land in Riverside County. However, this Federal land is currently subject to ORV activity (G. Ballmer, *in litt.*, 1991).

No specific regulations protect the quino checkerspot in Mexico. However, all hunting and export of wildlife in Mexico is prohibited, except under permit (Fuller and Swift 1984; Secretaria de Agricultura y Ganaderia, Subsecretaria y de la Fauna, Departamento de Conservación de la Fauna, undated). Little is known of the status of the isolated populations in

Mexico (Allen 1990) and any protection afforded to these populations does not insure the survival of the taxon.

E. Other Natural or Man-Made Factors Affecting its Continued Existence

The extremely restricted range, localized distribution, and small population size of the Laguna Mountains skipper and the quino checkerspot make them vulnerable to the effects of habitat loss, degradation and fragmentation, especially with regard to naturally occurring events (e.g., see Gilpin and Soule 1986). For example, several populations of the butterflies listed in this rule are known to consist of fewer than 5 to 15 individuals. The occurrence of even one of the following naturally occurring events could easily extirpate these populations.

Although both butterflies occur in fire-adapted ecosystems, a single fire event could eliminate affected populations. Orsak (1977) reported that a quino checkerspot population near Hidden Ranch, Black Star Canyon in the Santa Ana Mountains of Orange County was apparently destroyed by a fire in 1967. The quino checkerspot may be extirpated from Orange County.

Fire may be a necessary component for the maintenance of Laguna Mountains skipper habitat. The diversity of montane meadow habitats may be fire-dependent, including the skipper's larval host plant (Levy 1994). Historically, the skipper may have experienced local extirpations and recolonizations following local fire events. However, the present discontinuity and low population numbers would not enable the Laguna Mountains skipper to tolerate local extirpations due to fire.

Periodic droughts, like those that have occurred in recent years in southwestern California, can adversely affect both of the taxa in this rule. Drought is known to decrease numbers of butterflies (Thorne 1963). In addition to killing larvae by desiccation, drought conditions may (1) cause the early senescence or death of the larval host plant prior to completion of larval development or (2) lower the nutritional quality of the host plant (e.g., water content). Drought can also reduce the quantity and quality of adult nectar sources. Larval starvation and extirpation of local populations during periods of drought have been documented for *Euphydryas editha* (White 1974, Ehrlich *et al.* 1980).

The quino checkerspot is somewhat adapted to unpredictable weather patterns but requires sufficient patches of suitable habitat to respond to this

environmental variability. The quino checkerspot's dispersal capabilities vary considerably depending upon rainfall patterns and the resulting availability of adult nectar sources and larval food plants. For example, a San Diego County population of the quino checkerspot exhibited an increase in numbers as a result of favorable weather (Murphy and White 1984). The greater number of larvae defoliated the larval food plants. This central core area was left without sufficient egg-laying sites for females, and adults dispersed greater distances in search of additional suitable habitat. Ideally these dispersing adults would have found marginally suitable areas and in subsequent generations would have returned to a central core area. In this case, the mass dispersal failed to restore populations in previously occupied habitat, and the butterflies have not re-colonized the original site (Murphy and White 1984; Murphy, *in litt.*, 1988).

Habitat fragmentation can affect the genetic heterogeneity of small isolated populations like those of the Laguna Mountains skipper and the quino checkerspot. A basic principle of genetics states that small, fragmented populations are subject to a higher frequency of genetic drift and inbreeding. As a consequence, genetic variation of the population and individual heterozygosity is decreased. That can lead to inbreeding depression and lowered fitness of individuals. Low genetic diversity may decrease the ability of a species to adapt to changing environmental conditions. Genetically homogenous populations may be at a greater risk of extinction from environmental or demographic variability (e.g., from fire or drought events) than are large, diverse populations that can more readily recover from such events. For example, variation in the length of diapause among butterfly offspring requires genetic heterogeneity (Seeger and Brockman 1987). If a population is variable in diapause length, it has a lower risk of losing an entire cohort to adverse environmental conditions during any given season. Individuals with prolonged diapause may survive if drought causes high mortality during the next season. A large population or metapopulation can maintain the genetic heterogeneity needed to maintain the population during these kinds of events, but small, isolated populations cannot.

Interconnected populations can act as reservoirs to maintain other populations that may be subject to periodic extirpation (Murphy and White 1984, Harrison *et al.* 1988). If a naturally

occurring event eliminates a population of either of these taxa, few, if any neighboring populations are available to recolonize the area. No information is available regarding the dispersal abilities of the Laguna Mountains skipper. The sedentary behavior of the quino checkerspot decreases the probability that natural, long-distance dispersal could re-establish most extirpated local populations.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by these two taxa in determining to make this rule final. Based on this evaluation, the Service finds that the preferred action is to list the Laguna Mountains skipper (*Pyrgus ruralis lagunae*) and the quino checkerspot (*Euphydryas editha quino*) as endangered. The range and habitat of these taxa has been substantially reduced by historical activities associated with urban and agricultural development and recreational activities. These two taxa are threatened by one or more of the following factors—habitat alteration and destruction resulting from urban and agricultural development, grazing, fire management practices, over-collection, recreational activities, and displacement of the larval host plant by exotic species. The extremely restricted range, localized distribution, and small population size of both butterflies makes them very vulnerable to extinction by the factors listed above as well as by naturally occurring events such as fire and drought. For these reasons, the Service finds that the Laguna Mountains skipper and the quino checkerspot are in imminent danger of extinction throughout all or a significant portion of their ranges. Threatened status would not accurately reflect the diminished status and the threats to these taxa. Other alternatives to this action were considered but not preferred because not listing these taxa would not provide adequate protection and would be inconsistent with the purposes of the Act. Critical habitat is not being proposed for these taxa for the reasons discussed below.

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 endangered or threatened. The Service finds that designation of critical habitat is not prudent for the Laguna Mountains skipper and the quino checkerspot 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 such threat to the species, or (2) such designation of critical habitat would not be beneficial to the species.

Publication of precise maps and descriptions of critical habitat for the quino checkerspot and the Laguna Mountains skipper could result in increased collection of specimens by collectors. The commercial trade in rare butterflies could increase demand for these taxa once they are listed as endangered and critical habitat maps could lead unscrupulous collectors to endangered populations. Additional habitat destruction through trampling, discing, grading, and vandalism could result as well. As discussed above under Factor B in "Summary of Factors Affecting the Species," habitat for one of the largest quino checkerspot colonies was graded in Riverside County to deliberately eliminate that population, and a number of quino checkerspot colonies have been subject to collection.

The additional protection provided by the designation of critical habitat to a species would be provided through section 7 of the Act. 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. Section 7(a)(2) requires Federal agencies to insure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or destroy or adversely modify its critical habitat. The two taxa in this rule are confined to small geographical areas, and each population

is composed of so few individuals that the determinations for jeopardy to the species and adverse modification of critical habitat would be similar. Therefore, designation of critical habitat provides no benefits beyond those that these taxa would receive by virtue of their listing as endangered species, and would likely increase the risk of threat from collecting or other human activities. The Service concludes that the designation of critical habitat for the Laguna Mountains skipper and the quino checkerspot is not prudent at this time.

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 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)(1) requires Federal agencies to use their authorities to further the purposes of the Act by carrying out programs for listed species. 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 the species. If a Federal action may affect a listed species, the responsible Federal agency must enter into formal consultation with the Service.

Federal agencies expected to have involvement with the Laguna Mountains skipper and the quino checkerspot include the USFS and BLM due to the presence of habitat and populations within their jurisdiction. The Laguna Mountains skipper occurs on private and State-owned land as well as USFS lands. The quino checkerspot mostly occurs on privately owned lands with little or no Federal involvement, although the BLM owns a portion of one

site. The USFS is currently conferencing with the Service under section 7 of the Act in order to address grazing impacts within the Cleveland National Forest on both the Laguna Mountains skipper and quino checkerspot.

The Act and its implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (including harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt any of these), import or export, transport in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or 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.

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 a listing on proposed and ongoing activities within a species' range. The Service is currently coordinating with the USFS regarding activities on lands under their jurisdiction that may affect the taxa in this rule. Activities that the Service believes could potentially harm the Laguna Mountains skipper and the quino checkerspot and result in take include, but are not limited to:

- (1) Unauthorized handling or collecting of the taxa;
- (2) Unauthorized destruction/alteration of their habitat, including unauthorized livestock grazing;
- (3) Unauthorized pesticide applications in violation of label restrictions.

Activities that the Service believes are unlikely to result in a violation of section 9 are:

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

the final regulation adding these taxa to the list of endangered species;

- (2) Roadkills or injuries by vehicles on designated public roads;

- (3) Normal, authorized recreational activities in designated campsites and on authorized trails.

Questions as to whether specific activities will constitute a violation of section 9 should be directed to the Service's Carlsbad Field Office (see **ADDRESSES** section).

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing such permits are 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. Requests for copies of the regulations on listed wildlife and plants and inquiries on prohibitions and permits should be addressed to the U.S. Fish and Wildlife Service, Ecological Services—Endangered Species Permits, 911 NE 11th Avenue, Portland, Oregon 97232-4181 (telephone 503/231-6241; facsimile 503/231-6243).

Where applicable, the Service is encouraging private landowners to include the Laguna Mountains skipper and the quino checkerspot butterflies in habitat conservation plans developed as part of applications for incidental take permits. To date, one plan has included the quino checkerspot in the Central and Coastal Subregion of Orange County.

Reasons for Effective Date

The Service is concerned that issuance of a final rule for these animals that is not effective immediately upon publication will result in greatly intensified levels of collecting and commercial trade of the Laguna Mountains skipper and particularly the quino checkerspot (see Factor B above). In addition, any delay in the effective date of this rule provides an opportunity for vandalism by persons not wanting endangered species on their property. Because of the immediate threat posed by these activities, the Service finds that good cause exists for this rule to take effect immediately upon publication in accordance with 5 U.S.C. 553(d)(3).

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 Endangered Species Act of 1973, as amended. 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. This rulemaking was not subject to review by the Office of Management and Budget under Executive Order 12866.

References Cited

A complete list of all references cited herein is available upon request from the Carlsbad Field Office (see **ADDRESSES** section).

Author

The primary author of this final rule is Marjorie Nelson of the Carlsbad Field Office (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended 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 INSECTS, 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						
*	*	*	*	*	*		*
INSECTS							
*	*	*	*	*	*		*
Butterfly, quino checkerspot.	<i>Euphydryas editha quino.</i>	U.S.A. (CA), Mexico	NA	E	604	NA	NA
*	*	*	*	*	*		*
Skipper, Laguna Mountains.	<i>Pyrgus ruralis lagunae.</i>	U.S.A. (CA)	NA	E	604	NA	NA
*	*	*	*	*	*		*

Dated: December 24, 1996.
 John G. Rogers,
 Acting Director, Fish and Wildlife Service.
 [FR Doc. 97-1111 Filed 1-15-97; 8:45 am]
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