



United States  
Department of  
Agriculture

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Animal and  
Plant Health  
Inspection  
Service

Policy and Program  
Development

Environmental  
Services, Unit 149  
4700 River Road  
Riverdale, MD  
20737

Mr. Bryan Arroyo  
Assistant Director, Endangered Species Program  
U.S. Fish and Wildlife Service  
1849 C Street NW  
Washington, DC 20240

Dear Mr. Arroyo:

Pursuant to Section 412 of the Plant Protection Act of 2000 (7 United States Code (U.S.C.) § 7701) and its implementing permit regulations found at 7 Code of Federal Regulations (CFR) Part 330.200, the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS) permits the release of biological control (biocontrol) organisms and may restrict the importation, entry, exportation, or movement in interstate commerce of these organisms (Sec. 412(a)). Consistent with those authorities, APHIS has issued permits for the importation, environmental release, and interstate movement of many biocontrol agents to control the spread of invasive weeds.

Consistent with the requirements of section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*), APHIS has consulted on numerous occasions with the Fish and Wildlife Service (Service) on the potential impacts of permitting first-time environmental release of weed biocontrol organisms on federally listed species and critical habitat. Beginning in 1997, USDA, Agricultural Research Service (ARS) and APHIS began informal consultation with the Service on the proposed research program by ARS for the use of the leaf beetle *Diorhabda elongata* to control the invasive weed saltcedar (*Tamarix* spp.). Although APHIS was not involved in carrying out this program, ARS was required to obtain permits from APHIS for this activity.

Most recently, in March 2005, APHIS consulted with your staff on its own proposed program to release the beetle into 13 States, in locations north of 38° N latitude. This program was both permitted and carried out by APHIS and separate from the ARS program. The purpose of the APHIS program was to release a northern-adapted strain of *D. e. deserticola* originating from Fukang, China (now known tentatively as *D. carinulata*) at certain locations that would serve as “nursery” sites or insectaries for further distribution within those States. The States covered in that consultation included Colorado, Idaho, Kansas, Montana, Oregon, South Dakota, Wyoming, Iowa, Missouri, Nebraska, Nevada, North Dakota, and Washington. Although not part of the APHIS program, Utah and northern California were also considered in the consultation because beetles released in neighboring States could naturally disperse



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there. In the March 2005, biological assessment (BA), APHIS analyzed the potential impacts of its proposed program on federally-listed species and critical habitat in the program area. APHIS determined that release of *D. carinulata* was not likely to adversely affect federally listed species, species proposed for listing, or their critical habitats in the 13 States included in the APHIS program, and Utah and northern California.

The Service's concurrence for the APHIS program was based on several key assumptions on the ecology of the beetle, and saltcedar and its contribution to the conservation of the southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher). Specifically, in your July 11, 2005 letter, you stated that your concurrence on the APHIS program was based on the following assumptions:

- The low likelihood of successful reproduction of *D. carinulata* in areas south of 38° N latitude. Critical daylength for *D. carinulata* is expected to limit the success of the beetle at or south of 38° N latitude because shorter daylength induces premature diapause, preventing the beetles from exploiting available resources or dispersing;
- Saltcedar had limited suitability for insectivorous birds, in particular the flycatcher;
- Populations of *D. carinulata* would not reach sufficient levels to defoliate saltcedar sufficient to impact any of the flycatchers breeding, feeding or sheltering habit;
- Land managers and land owners would take sole responsibility for any unanticipated impacts associated with the permitted release of *D. carinulata* in listed species habitats and/or designated critical habitat areas;
- Ultimately, the effects of the release of *D. carinulata* would have beneficial effects to the conservation of listed species and critical habitat, including the flycatcher;
- Saltcedar removal would not result in significant adverse thermal changes where listed species and critical habitat co-occur with saltcedar, and may be beneficial by returning habitat to more natural thermal conditions;
- Defoliation and death of saltcedar plants would likely reduce fire risk in listed species' habitat;
- Mortality of saltcedar was expected to be gradual, with at least 3 years before any mortality would occur;
- Vegetation effects were expected to have no effect or improve habitat conditions for listed species and critical habitat; and
- Any impacts associated with increased erosion from the loss of saltcedar would be minimal.

Given the aforementioned assumptions and the best scientific data available at the time, the Service concluded that the impacts associated with the release of *D. carinulata* for control of saltcedar as part of the APHIS program would be insignificant, discountable, or otherwise beneficial, because the impacts to listed species or critical habitat would not be measurable or detectable.

However, based on new information, APHIS believes that there may be adverse effects of the release of *D. carinulata* on listed species and critical habitat that was not previously available or considered in the 2005 consultation. We believe this new information warrants reinstitution of consultation. The following consultation history and assessment of new information is provided to summarize our consultation efforts to date, the status of the APHIS program to date, and our understanding of potential impacts to listed species and critical habitat.

### ***Consultation History***

October 17, 1997 — ARS submitted a draft BA to the Service in Albuquerque, New Mexico, regarding its proposed caged and open field research on *Diorhabda elongata*.

December 9, 1998 — APHIS requested the Service's review and concurrence with the ARS experimental release proposal (a summary of the draft BA submitted in 1997 and discussion of the research phase of the ARS program). APHIS requested concurrence because of its permitting role in the ARS program.

May 13, 1999 — The Service, APHIS, ARS and others met to discuss the potential impacts of the ARS research program on the flycatcher, based on information of flycatchers nesting in saltcedar near the Rio Grande in New Mexico.

June 3, 1999 — The Service issued a revised letter of concurrence to APHIS, removing all ARS proposed research and release sites on the Rio Grande in Texas and New Mexico because of proximity to flycatcher nesting areas. The Service indicated that for consideration of the removed sites or any additional sites, a separate consultation must be initiated. Release of agents from cages at the release sites would not be undertaken until wildlife and monitoring plans were completed, and a new consultation would be initiated before general release of the biocontrol organism occurs.

Summer 1999 — As part of the ARS program, APHIS issued permits to ARS and others for establishment of field cages in the following locations: Seymour, Texas; Pueblo, Colorado; Lovell, Wyoming; Lake Ft. Peck, Montana; Lovelock, Stillwater, and Schurz, Nevada; Independence, Ft. Hunter-Liggett, and Clearlake, California; and Delta Utah. *Diorhabda* sp. beetles originating from Fukang, China were placed in cages at all sites except in Utah. At that site, beetles originated from Chilik, Kazakhstan. Currently, beetles originating from both of these locations are now tentatively considered a new species, *D. carinulata*. Beetles remained within cages for the duration of the permits.

Late-summer 2000 — APHIS submitted 2 years of results of the ARS caged beetle studies (1999 and 2000) and monitoring plans to the Service. APHIS then issued permits to various Federal

and State agencies that were part of the ARS program including ARS, Department of Interior's Bureau of Land Management and Bureau of Reclamation, and Nevada Department of Agriculture, to allow for removal of the cages and release of beetles at all sites. Distribution other than natural dispersal from those sites was not permitted.

Since that time, APHIS has continued to issue permits to establish new releases of *Diorhabda* in new locations. In each case, APHIS requires that permit applicants consult with the Service and receive a letter of concurrence before permits are issued. However, since approximately 2003 and independently from APHIS authorization, other entities and agencies have collected and redistributed *Diorhabda* from established populations within their respective States. For example, *D. carinulata* has been spread throughout the State of Utah from collections made from the permitted site established in Delta in 1999. In Texas, ARS has consulted with the Service and is releasing and spreading other southern-adapted biotypes/species of *Diorhabda* within that State. APHIS does not regulate the intrastate movement of biological control agents of weeds.

March 30, 2005 — APHIS initiated consultation and submitted a BA for its own program for biocontrol of saltcedar in 13 States. All proposed releases were at sites north of 38° N latitude. The purpose of the APHIS program was to release a northern-adapted strain of *D.e deserticola* originating from Fukang, China (now known as *D. carinulata*) at certain locations that would serve as “nursery” sites or insectaries.

July 11, 2005 — The Service issued a letter of concurrence for the APHIS program to release *D. carinulata* originating in Fukang, China for the biocontrol of saltcedar in 13 States.

Since 2005, APHIS has established a total of 50 insectaries in 10 of the 13 States (Colorado, Idaho, Iowa, Kansas, Montana, Nebraska, Oregon, South Dakota, Washington, and Wyoming), in cooperation with federal, state, and local agencies. From 2005 to 2008, more than 180,000 *D. carinulata* adults have been collected and released at the insectary sites. At present, 25 of the insectaries have established populations, and of those, approximately 10 sites have populations large enough for collection and redistribution intrastate. Monitoring data has been collected at the insectary sites. Of the remaining three States, APHIS has no plans to establish insectaries in Nevada, but may consider releases in Missouri and North Dakota in the future.

May 2007 — APHIS received a request from the State of Utah to be included in the APHIS program. APHIS, in consultation with the Service, evaluated the potential effects of allowing Utah to participate in the program and ultimately decided not to include Utah in the program citing concerns for impacts to the flycatcher.

September 10, 2008 — APHIS was contacted by the Service indicating that *Diorhabda* was found in designated critical habitat of the flycatcher in Arizona. It was determined that this occurrence was due to the collection of *D. carinulata* from the Delta, Utah site and its release into southern Utah. This movement was not authorized or carried out by APHIS. APHIS contacted the Service on September 10 and 11 to determine what, if any, course of action should be taken.

October 15, 2008 — APHIS' Western Regional Office contacted the Service in the Ecological Services Field Office in Phoenix, Arizona, and discussed reinitiation of consultation based on the new information that the beetle had progressed into flycatcher habitat. (As a result of this discussion, it was APHIS' understanding that the Service would prepare an internal memo to set forth guidance for the actions APHIS needed to carry out, and would contact APHIS with its recommendation.)

February 18 and 19, 2009 — APHIS staff attended the 2009 Tamarisk and Russian Olive Research Conference in Reno, Nevada.

February 24 and March 3, 2009 — APHIS contacted the Service, asking for further assistance on how to reinitiate consultation based on new information received at the Tamarisk and Russian Olive Research Conference.

### ***New Information***

At the 2009 Tamarisk and Russian Olive Research Conference in Reno, Nevada, Dr. Dan Bean (Colorado Department of Agriculture) presented scientific data indicating that *D. carinulata* in Pueblo, Colorado, has adapted and may successfully reproduce in areas south of 38° N latitude, and possibly to as far south as 32° N latitude.

In addition, Theresa Olson (Bureau of Reclamation) made a presentation at this conference indicating that *D. carinulata* defoliated three sites on the Virgin River near St. George, Utah, that were occupied by the flycatcher at the height of their breeding season and that the defoliation may have a large impact on nesting flycatchers.

### ***Conclusion***

Section 7(a)(2) of the ESA and its implementing regulations (50 CFR Part 402.16) require Federal agencies to reinitiate consultation on previously reviewed actions if any of the following occur:

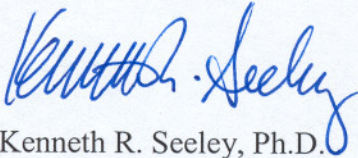
- The amount or extent of take specified in the incidental take statement is exceeded.
- New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered.
- The identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion.
- New species is listed or critical habitat designated that may be affected by the identified action.

Based on the new information presented herein and the potential for adverse impacts to listed species and critical habitat not previously considered, APHIS is requesting reinitiation of consultation.

To that end, we are requesting your technical assistance in preparation of a revised BA including an up-to-date status of the species and environmental baseline for the flycatcher and any other relevant information that may have bearing on this consultation. Our intent is to resolve this issue as expeditiously and efficiently as possible.

We look forward to your assistance. Should you have any questions regarding this request, please do not hesitate to contact Tracy Horner of my staff at (301) 734-5213 or myself at (301) 734-4334.

Sincerely,

A handwritten signature in blue ink that reads "Kenneth R. Seeley". The signature is written in a cursive style with a large, stylized initial "K".

Kenneth R. Seeley, Ph.D.  
Chief, Environmental Services

cc:

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