

115TH CONGRESS 1ST SESSION H.R. 1054

To promote botanical research and botanical sciences capacity, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

February 14, 2017

Mr. Quigley (for himself and Ms. Ros-Lehtinen) introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committees on Agriculture, Armed Services, Transportation and Infrastructure, and House Administration, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To promote botanical research and botanical sciences capacity, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Botanical Sciences and
- 5 Native Plant Materials Research, Restoration, and Pro-
- 6 motion Act".
- 7 SEC. 2. TABLE OF CONTENTS.
- 8 The table of contents for this Act is as follows:

- Sec. 1. Short title.
- Sec. 2. Table of contents.
- Sec. 3. Definitions.

TITLE I—PROMOTING BOTANICAL RESEARCH AND BOTANICAL SCIENCES CAPACITY

- Sec. 101. Department of the Interior botanical research.
- Sec. 102. Staff enhancement.

TITLE II—GENERATING DEMAND FOR NATIVE PLANT MATERIALS

- Sec. 201. Policy for use of locally adapted native plant materials by Department of Agriculture and Department of the Interior.
- Sec. 202. Policy for use of locally adapted native plant materials by Department of Defense.
- Sec. 203. Surface transportation program.
- Sec. 204. Native plant materials requirements for Federal development projects.

TITLE III—AUTHORIZATION OF FEDERAL NATIVE PLANT MATERIALS RELATED ACTIVITIES

- Sec. 301. Interagency plant materials efforts.
- Sec. 302. Bureau of Land Management Plant conservation program.
- Sec. 303. National Fish and Wildlife Foundation Plant conservation programs.
- Sec. 304. Grants to support collaborative efforts to prevent endangered species status.

1 SEC. 3. DEFINITIONS.

- 2 As used in this Act, the following terms have the fol-
- 3 lowing meanings:
- 4 (1) Invasive plant species.—The term
- 5 "invasive plant species" means a plant species that
- 6 is nonnative with respect to an ecosystem and whose
- 7 introduction into that ecosystem will cause, or is
- 8 likely to cause, economic harm, environmental harm,
- 9 or harm to human, animal, or plant health.
- 10 (2) LOCALLY ADAPTED.—The term "locally
- adapted" with respect to plants, means plants that
- originate from an area that is geographically proxi-

- 1 mate to a planting area and that are environ-2 mentally adapted to, and likely to succeed in becom-3 ing established and persisting within, such area.
 - (3) Native plant species.—The term "native plant species" means indigenous terrestrial and aquatic plant species that evolved naturally in a defined native ecosystem.
 - (4) Nonnative plant species" means a plant that has been introduced by humans to a location outside its native or natural range and may, depending on relevant facts and circumstances, include a species introduced from another continent, ecosystem, seed zone, or habitat within an ecosystem.
 - (5) PLANT MATERIALS.—The term "plant materials" includes, with respect to a native plant species or a nonnative plant species, such a plant or its seeds, eggs, spores, or other biological material capable of propagating that species.

TITLE I—PROMOTING **BOTAN-**ICAL RESEARCH AND BOTAN-2 ICAL SCIENCES CAPACITY 3 4 SEC. 101. DEPARTMENT OF THE INTERIOR BOTANICAL RE-5 SEARCH. 6 (a) IN GENERAL.—The Secretary of the Interior, acting through the Bureau of Land Management, United 7 8 States Geological Survey, United States Fish and Wildlife 9 Service, National Park Service, and such other agencies 10 and instrumentalities as the Secretary determines appro-11 priate, shall support a robust program of intramural and 12 extramural botanical science research as relevant and appropriate to support the Department's land management 13 14 responsibilities. 15 (b) Areas of Emphasis.—Research conducted pursuant to this section shall include a focus on the following 16 17 topics: 18 (1) Effective approaches to restoring habitat 19 damaged by wildfires that incorporate the use of ap-20 propriate plant materials. 21 (2) Effective methods for developing and using 22 locally adapted native plant materials in land man-23 agement activities. 24 (3) Effective mitigation strategies for com-25 bating invasive plant species.

- 1 (4) Mitigation strategies related to the impacts
- 2 of long- and medium-term environmental changes
- 3 such as changes in moisture levels, temperature,
- 4 landscape fragmentation, nonnative animal and
- 5 plant species, and human activity.
- 6 (5) Methods to promote the recovery of threat-
- 7 ened and endangered species.
- 8 (c) Extramural Research.—As determined appro-
- 9 priate by the Secretary, research conducted under this sec-
- 10 tion may be carried out through competitively awarded
- 11 grants or contracts, or cooperative agreements, awarded
- 12 in accordance with all applicable requirements governing
- 13 such activities.
- 14 (d) Authorization of Appropriations.—To carry
- 15 out the purposes of this section, there are authorized to
- 16 be appropriated \$10,000,000 for fiscal year 2018, and
- 17 such sums as may be necessary for subsequent fiscal
- 18 years.
- 19 SEC. 102. STAFF ENHANCEMENT.
- 20 (a) In General.—For the purpose of improving the
- 21 Department's land management capabilities, the Secretary
- 22 of the Interior is authorized to augment the expertise of
- 23 the Department of the Interior in the botanical sciences
- 24 by—

| 1 | (1) hiring additional personnel with expertise in |
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| 2 | the botanical sciences; and |
| 3 | (2) establishing a loan forgiveness program to |
| 4 | facilitate the hiring of such personnel. |
| 5 | (b) Authorization.— |
| 6 | (1) Subject to the availability of appropriations |
| 7 | for such purpose, by not later than September 30 |
| 8 | 2019, the Secretary shall hire not more than 20 full- |
| 9 | time Botanical Science Personnel to support the De- |
| 10 | partment's land management responsibilities. The |
| 11 | Secretary shall determine the appropriate placement |
| 12 | of such personnel within the appropriate agencies of |
| 13 | the Department with major land management re- |
| 14 | sponsibilities. The Secretary may waive any limita- |
| 15 | tion on the number of full-time equivalent personnel |
| 16 | assigned to the Department and its constituent |
| 17 | agencies in order to carry out the purposes of this |
| 18 | section. |
| 19 | (2) Personnel hired pursuant to paragraph (1) |
| 20 | shall be— |
| 21 | (A) in addition to any positions authorized |
| 22 | before the date of the enactment of this Act |
| 23 | and any existing vacancies within the Depart- |
| 24 | ment on such date; |
| 25 | (B) part of the Competitive Service; and |

| 1 | (C) hired in compliance with all applicable |
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| 2 | provisions of title 5, United States Code. |
| 3 | (c) Loan Repayment Program.— |
| 4 | (1) In general.—The Secretary shall establish |
| 5 | a program to provide educational loan repayment to |
| 6 | qualifying individuals who agree to a term of em- |
| 7 | ployment with the Department as Botanical Science |
| 8 | Personnel. |
| 9 | (2) Eligibility.—To be eligible to participate |
| 10 | in the loan repayment program under this sub- |
| 11 | section, an individual shall— |
| 12 | (A) either— |
| 13 | (i) have a degree in botanical sciences; |
| 14 | (ii) be enrolled in an approved grad- |
| 15 | uate training program in botanical |
| 16 | sciences; or |
| 17 | (iii) be enrolled as a full-time student |
| 18 | in an accredited educational institution, |
| 19 | and in the final year of a course of a study |
| 20 | or program, offered by such institution and |
| 21 | approved by the Secretary, leading to a de- |
| 22 | gree in botanical sciences; and |
| 23 | (B) submit to the Secretary an application |
| 24 | for a contract described in paragraph (4). |

| 1 | (3) Information to be included with ap- |
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| 2 | PLICATION AND CONTRACT FORMS.—In dissemi- |
| 3 | nating application forms and contract forms to indi- |
| 4 | viduals desiring to participate in the loan repayment |
| 5 | program, the Secretary shall include with such forms |
| 6 | a fair summary of the rights and liabilities of an in- |
| 7 | dividual whose application is approved (and whose |
| 8 | contract is accepted). Such information shall be |
| 9 | written in a manner calculated to be understood by |
| 10 | the average individual applying to participate in the |
| 11 | loan repayment program. |
| 12 | (4) Contracts.— |
| 13 | (A) IN GENERAL.—An individual becomes |
| 14 | a participant in the loan repayment program |
| 15 | only upon the Secretary and the individual en- |
| 16 | tering into a written contract whereby— |
| 17 | (i) the Secretary agrees to pay on be- |
| 18 | half of the individual loans in accordance |
| 19 | with paragraph (5), subject to the avail- |
| 20 | ability of appropriated funds; and |
| 21 | (ii) the individual agrees to— |
| 22 | (I) accept loan payments on be- |
| 23 | half of the individual; and |
| 24 | (II) if applicable, maintain enroll- |
| 25 | ment and acceptable academic stand- |

ing in a course of study or training
described in paragraph (2) and serve
for a time period equal to 2 years or
such longer period as the individual
may agree to as a botanical scientist
employed by the Department.

(B) OTHER TERMS AND CONDITIONS.— Such contracts shall include all other necessary and appropriate terms and conditions to clarify the rights, obligations, and liabilities of the parties.

(5) Repayment.—

(A) IN GENERAL.—A loan repayment provided for an individual under a written contract under the repayment program authorized by this subsection shall consist of payment on behalf of the individual of the principal, interest, and related expenses on government and commercial loans received by the individual regarding the undergraduate or graduate education of the individual (or both), which loans were made for tuition, other reasonable educational expenses, or reasonable living expenses, as determined by the Secretary.

- 1 (B) Amounts.—For each year of obligated service that an individual contracts to serve, the 2 3 Secretary may pay up to \$50,000 (plus, begin-4 ning with fiscal year 2019, an amount determined by the Secretary on an annual basis to 6 reflect inflation) on behalf of the individual for 7 loans described in this paragraph. In making a 8 determination of the amount to pay for a year 9 of such service by an individual, the Secretary 10 may enter into an agreement with the holder of any such loan for which payments are made to 12 establish a schedule for the making of such pay-13 ments.
 - (6) Employment ceiling.—Notwithstanding any other provision of law, individuals who have entered into written contracts with the Secretary under this section, while undergoing academic or other training, shall not be counted against any employment ceiling affecting the Department.
- 20 (d) Definition.—For the purposes of this section, 21 the term "Botanical Science Personnel" means individuals with post-secondary education in the field of botany, in-23 cluding plant ecologists and individuals with a bachelor's degree in plant biology.

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| 1 | (e) Authorization of Appropriations.—To carry |
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| 2 | out the purposes of this section, there are authorized to |
| 3 | be appropriated— |
| 4 | (1) for fiscal year 2018— |
| 5 | (A) \$3,000,000 for subsection (b); and |
| 6 | (B) \$1,000,000 for subsection (c); and |
| 7 | (2) for each fiscal year after fiscal year 2018, |
| 8 | such sums as may be necessary. |
| 9 | TITLE II—GENERATING DEMAND |
| 10 | FOR NATIVE PLANT MATERIALS |
| 11 | SEC. 201. POLICY FOR USE OF LOCALLY ADAPTED NATIVE |
| 12 | PLANT MATERIALS BY DEPARTMENT OF AG |
| 13 | RICULTURE AND DEPARTMENT OF THE INTE |
| 14 | RIOR. |
| | |
| 15 | (a) Policy.—In undertaking a land management ac- |
| 15 16 | (a) Policy.—In undertaking a land management activity on Federal lands under the jurisdiction of the De- |
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| 16 17 | tivity on Federal lands under the jurisdiction of the De- |
| 16 17 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior |
| 16 17 18 19 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior, including maintenance and restoration in response to deg- |
| 16 17 18 19 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior including maintenance and restoration in response to degradation caused by human activity or natural events (such |
| 116 117 118 119 220 221 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior, including maintenance and restoration in response to degradation caused by human activity or natural events (such as fire, flood, or infestation), it is the policy of the United |
| 116 117 118 119 220 221 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior, including maintenance and restoration in response to degradation caused by human activity or natural events (such as fire, flood, or infestation), it is the policy of the United States that preference shall be made to the extent prac- |
| 16 17 18 19 20 21 22 | tivity on Federal lands under the jurisdiction of the Department of Agriculture or the Department of the Interior, including maintenance and restoration in response to degradation caused by human activity or natural events (such as fire, flood, or infestation), it is the policy of the United States that preference shall be made to the extent practicable for the use of locally adapted native plant materials. |

| 1 | and the Secretary of the Interior, acting through the heads |
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| 2 | of land management agencies of the Department of the |
| 3 | Interior, shall— |
| 4 | (1) implement the policy established by sub- |
| 5 | section (a) through appropriate administrative ac- |
| 6 | tions; and |
| 7 | (2) specifically identify situations in which the |
| 8 | use of nonnative plant materials may be warranted, |
| 9 | including situations in which— |
| 10 | (A) emergency conditions require the pro- |
| 11 | tection of basic resource values; |
| 12 | (B) an interim, nonpersistent measure is |
| 13 | needed to aid in the reestablishment of native |
| 14 | plant species; |
| 15 | (C) native plant materials are not reason- |
| 16 | ably available; or |
| 17 | (D) the plant community subject to the |
| 18 | land management activity has been permanently |
| 19 | altered. |
| 20 | SEC. 202. POLICY FOR USE OF LOCALLY ADAPTED NATIVE |
| 21 | PLANT MATERIALS BY DEPARTMENT OF DE- |
| 22 | FENSE. |
| 23 | (a) Policy.—Chapter 159 of title 10, United States |
| 24 | Code, is amended by inserting after section 2692 the fol- |
| 25 | lowing: |

| 1 | "§ 2693. Policy for use of locally adapted native plant |
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| 2 | materials in management of Department |
| 3 | of Defense lands |
| 4 | "(a) Policy.—In undertaking a land management |
| 5 | activity on land under the jurisdiction of the Department |
| 6 | of Defense, including land withdrawn for or held by permit |
| 7 | or lease, it is the policy of the United States that pref- |
| 8 | erence to the extent practicable shall be made for the use |
| 9 | of locally adapted native plant materials. |
| 10 | "(b) Implementation.—The Secretary of Defense, |
| 11 | acting through the Under Secretary for Installations, |
| 12 | shall— |
| 13 | "(1) implement the policy established by sub- |
| 14 | section (a) through appropriate administrative ac- |
| 15 | tions; and |
| 16 | "(2) specifically identify situations in which the |
| 17 | use of nonnative plant materials may be warranted, |
| 18 | including situations in which— |
| 19 | "(A) emergency conditions require the pro- |
| 20 | tection of basic resource values; |
| 21 | "(B) an interim, nonpersistent measure is |
| 22 | needed to aid in the reestablishment of native |
| 23 | plant species; |
| 24 | "(C) native plant materials are not reason- |
| 25 | ably available: or |

| 1 | "(D) the plant community subject to the |
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| 2 | land management activity has been permanently |
| 3 | altered. |
| 4 | "(c) Consultation.—The Secretary of Defense |
| 5 | shall consult with the Secretary of the Interior and the |
| 6 | Secretary of Agriculture regarding implementation of this |
| 7 | section. |
| 8 | "(d) Definitions.—In this section: |
| 9 | "(1) Land management activity.—The term |
| 10 | 'land management activity' includes— |
| 11 | "(A) maintenance and restoration; and |
| 12 | "(B) conservation and cultural activities |
| 13 | pursuant to sections 2691 and 2694 of this |
| 14 | title. |
| 15 | "(2) Locally adapted.—The term 'locally |
| 16 | adapted' with respect to plants, means plants that |
| 17 | originate from an area that is geographically proxi- |
| 18 | mate to a planting area and that are environ- |
| 19 | mentally adapted to, and likely to succeed in becom- |
| 20 | ing established and persisting within, such area. |
| 21 | "(3) Native plant species.—The term 'na- |
| 22 | tive plant species' means indigenous terrestrial and |
| 23 | aquatic plant species that evolved naturally in a de- |
| 24 | fined native ecosystem. |

- "(4) Nonnative plant species.—The term nonnative plant species' means a plant that has been introduced by humans to a location outside its native or natural range and may, depending on relevant facts and circumstances, include a species introduced from another continent, ecosystem, seed zone, or habitat within an ecosystem.
- 6 "(5) Plant materials.—The term 'plant ma-9 terials' includes, with respect to a native plant spe-10 cies or a nonnative plant species, such a plant or its 11 seeds, eggs, spores, or other biological material capa-12 ble of propagating that species.".
- 13 (b) CLERICAL AMENDMENT.—The table of sections 14 at the beginning of chapter 159 of title 10, United States 15 Code, is amended by inserting after the item relating to 16 section 2692 the following:

"2693. Policy for use of locally adapted native plant materials in management of Department of Defense lands.".

17 SEC. 203. SURFACE TRANSPORTATION PROGRAM.

- 18 Section 329 of title 23, United States Code, is
- 19 amended by adding at the end the following:
- 20 "(d) Native Plant Materials.—
- 21 "(1) In General.—In carrying out environ-
- 22 mental mitigation efforts and environmental restora-
- 23 tion and pollution abatement activities as authorized
- by section 133(b), a State shall, to the extent prac-

| 1 | ticable, maximize the use of locally adapted native |
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| 2 | plant materials. |
| 3 | "(2) Consultation.—The Secretary shall con- |
| 4 | sult with the Secretary of the Interior and the Sec- |
| 5 | retary of Agriculture regarding the implementation |
| 6 | of this subsection.". |
| 7 | SEC. 204. NATIVE PLANT MATERIALS REQUIREMENTS FOR |
| 8 | FEDERAL DEVELOPMENT PROJECTS. |
| 9 | The sponsor of any development or redevelopment |
| 10 | project involving a Federal facility with a footprint that |
| 11 | exceeds 5,000 square feet shall use site planning, design, |
| 12 | construction, and maintenance strategies for the property |
| 13 | to establish, maintain, or restore, to the maximum extent |
| 14 | technically feasible, the use of locally adapted native plant |
| 15 | materials on all natural spaces, including, where feasible, |
| 16 | roofs and other appropriate portions of the structure. |
| 17 | TITLE III—AUTHORIZATION OF |
| 18 | FEDERAL NATIVE PLANT MA- |
| 19 | TERIALS RELATED ACTIVI- |
| 20 | TIES |
| 21 | SEC. 301. INTERAGENCY PLANT MATERIALS EFFORTS. |
| 22 | (a) Activities.—The heads of the agencies shall col- |
| 23 | laborate, as appropriate, regarding land use responsibility |
| 24 | to undertake the following activities related to native plant |

25 materials:

| 1 | (1) Identify seed needs and ensure the reliable |
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| 2 | availability of genetically appropriate seed. |
| 3 | (2) Conduct research to develop genetically ap- |
| 4 | propriate seed and to improve technology for seed |
| 5 | production and ecological restoration. |
| 6 | (3) Support land managers' ability to make |
| 7 | timely and informed seeding decisions for ecological |
| 8 | restoration. |
| 9 | (4) Efforts to enhance, protect, and restore |
| 10 | plant materials necessary to support pollinators and |
| 11 | dispersers. |
| 12 | (5) Efforts to coordinate activities aimed at |
| 13 | sustaining and restoring public lands through the |
| 14 | use of techniques and materials that promote to the |
| 15 | extent practicable the use of locally adapted native |
| 16 | plant materials. |
| 17 | (b) AGENCIES.—For the purposes of this section, the |
| 18 | term "agencies" means the following: |
| 19 | (1) In the Department of the Interior: |
| 20 | (A) Bureau of Indian Affairs. |
| 21 | (B) Bureau of Land Management. |
| 22 | (C) National Park Service. |
| 23 | (D) United States Fish and Wildlife Serv- |
| 24 | ice. |
| 25 | (E) United States Geological Survey. |

| 1 | (2) In the Department of Agriculture: |
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| 2 | (A) Agricultural Research Service. |
| 3 | (B) Forest Service. |
| 4 | (C) National Institute of Food and Agri- |
| 5 | culture. |
| 6 | (D) Natural Resources Conservation Serv- |
| 7 | ice. |
| 8 | (3) United States Botanic Garden. |
| 9 | (4) Smithsonian Institution. |
| 10 | (5) Federal Highway Administration. |
| 11 | SEC. 302. BUREAU OF LAND MANAGEMENT PLANT CON |
| 12 | SERVATION PROGRAM. |
| 13 | (a) In General.—The Bureau of Land Management |
| 14 | is authorized to undertake activities to develop and use |
| 15 | native plant materials. |
| 16 | (b) ACTIVITIES.—The following activities are within |
| 17 | the scope of this authority: |
| 18 | (1) Identifying, evaluating, and protecting rare |
| 19 | plants on public lands. |
| 20 | (2) Understanding the effects of human activity |
| 21 | on native plant species and communities on public |
| 22 | lands. |
| 23 | (3) Supporting efforts to develop genetically ap- |
| 24 | propriate native plant materials for restoring and |
| 25 | maintaining habitat for animal and plant species, in- |

| 1 | cluding sage grouse, and monitoring the effective- |
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| 2 | ness of such materials. |
| 3 | (4) Ensuring that the needs of the agency for |
| 4 | native plant materials are met. |
| 5 | (5) Developing seed transfer zones and guide- |
| 6 | lines. |
| 7 | (6) Supporting public-private partnerships to |
| 8 | catalogue and store plant materials. |
| 9 | (7) Coordinating a national network of seed |
| 10 | storage warehouses. |
| 11 | (8) Implementing habitat conservation and res- |
| 12 | toration on a landscape scale. |
| 13 | (9) Supporting public-private efforts, and volun- |
| 14 | teer efforts to support plant conservation. |
| 15 | (c) Authorization of Appropriations.—To carry |
| 16 | out the purposes of this section, there are authorized to |
| 17 | be appropriated— |
| 18 | (1) for fiscal year 2018, \$35,000,000; and |
| 19 | (2) for each fiscal year after fiscal year 2018, |
| 20 | such sums as may be necessary. |
| 21 | SEC. 303. NATIONAL FISH AND WILDLIFE FOUNDATION |
| 22 | PLANT CONSERVATION PROGRAMS. |
| 23 | The National Fish and Wildlife Foundation shall— |
| 24 | (1) ensure that a robust program of activities |
| 25 | specifically focused on the conservation and protec- |

- 1 tion of native plants is incorporated into its existing
- 2 programs and activities; and
- 3 (2) provide a report to Congress on its imple-
- 4 mentation of this section.

5 SEC. 304. GRANTS TO SUPPORT COLLABORATIVE EFFORTS

- 6 TO PREVENT ENDANGERED SPECIES STATUS.
- 7 The Fish and Wildlife Act of 1956 (16 U.S.C. 742a
- 8 et seq.) is amended by adding at the end the following
- 9 new section:
- 10 "SEC. 13. THREATENED AND ENDANGERED PLANTS.
- 11 "(a) IN GENERAL.—The Secretary of the Interior,
- 12 acting through the United States Fish and Wildlife Serv-
- 13 ice, shall support a program of collaborative grants to sup-
- 14 port efforts to prevent rare plant species from becoming
- 15 endangered species and to encourage the recovery of en-
- 16 dangered plant species. Awards pursuant to this section
- 17 shall be made competitively in compliance with fully trans-
- 18 parent procedures.
- 19 "(b) Preference shall be given under
- 20 this section to projects that involve collaborations between
- 21 Federal, State, and local units of government working in
- 22 collaboration with nonprofit organizations with knowledge
- 23 and experience in rare and endangered plant restoration
- 24 issues.

1 "(c) Authorization of Appropriations.—To
2 carry out the provisions of this section, there are author3 ized to be appropriated—
4 "(1) \$54,000,000 for fiscal year 2018; and
5 "(2) such sums as may be necessary for fiscal
6 years after fiscal year 2018.".