

116TH CONGRESS  
1ST SESSION

# H. R. 1572

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

---

## IN THE HOUSE OF REPRESENTATIVES

MARCH 6, 2019

Mr. QUIGLEY (for himself, Mr. ROONEY of Florida, Mr. SEAN PATRICK MALONEY of New York, Ms. ESHOO, Ms. BLUNT ROCHESTER, Ms. MCCOLLUM, Ms. JUDY CHU of California, Mr. MCNERNEY, Mr. MCGOVERN, Mr. CASTEN of Illinois, Ms. NORTON, Mr. DESAULNIER, Mr. COHEN, Mrs. CAROLYN B. MALONEY of New York, Ms. STEFANIK, Mr. TONKO, Mr. COOPER, Mr. KILMER, Mr. MALINOWSKI, Mr. SCHNEIDER, Ms. GABBARD, Ms. WASSERMAN SCHULTZ, and Mr. CASE) introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committee on Agriculture, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Botanical Sciences and  
3 Native Plant Materials Research, Restoration, and Pro-  
4 motion Act”.

5 **SEC. 2. TABLE OF CONTENTS.**

6 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.

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.

7 **SEC. 3. DEFINITIONS.**

8 As used in this Act, the following terms have the fol-  
9 lowing meanings:

- 10 (1) **INVASIVE PLANT SPECIES.**—The term  
11 “invasive plant species” means a plant species that  
12 is nonnative with respect to an ecosystem and whose  
13 introduction into that ecosystem will cause, or is  
14 likely to cause, economic harm, environmental harm,  
15 or harm to human, animal, or plant health.

1           (2) **LOCALLY ADAPTED.**—The term “locally  
2 adapted”, with respect to plants, means plants that  
3 originate from an area that is geographically proximate  
4 to a planting area and that are environmentally  
5 adapted to, and likely to succeed in becoming  
6 established and persisting within, such area.

7           (3) **NATIVE PLANT SPECIES.**—The term “native  
8 plant species” means indigenous terrestrial and  
9 aquatic plant species that evolved naturally in a defined  
10 native ecosystem.

11           (4) **NONNATIVE PLANT SPECIES.**—The term  
12 “nonnative plant species” means a plant that has  
13 been introduced by humans to a location outside its  
14 native or natural range and may, depending on relevant  
15 facts and circumstances, include a species introduced  
16 from another continent, ecosystem, seed zone, or habitat  
17 within an ecosystem.

18           (5) **PLANT MATERIALS.**—The term “plant materials”  
19 includes, with respect to a native plant species or a  
20 nonnative plant species, such a plant or its seeds, eggs,  
21 spores, or other biological material capable of propagating  
22 that species.

1 **TITLE I—PROMOTING BOTAN-**  
2 **ICAL RESEARCH AND BOTAN-**  
3 **ICAL SCIENCES CAPACITY**

4 **SEC. 101. DEPARTMENT OF THE INTERIOR BOTANICAL RE-**  
5 **SEARCH.**

6 (a) IN GENERAL.—The Secretary of the Interior, act-  
7 ing through the Bureau of Land Management, United  
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 ap-  
13 propriate to support the Department’s land management  
14 responsibilities.

15 (b) AREAS OF EMPHASIS.—Research conducted pur-  
16 suant to this section shall include a focus on the following  
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 2020, 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  
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) IN GENERAL.—Subject to the availability of  
7 appropriations for such purpose, by not later than  
8 September 30, 2020, the Secretary shall hire not  
9 more than 20 full-time Botanical Science Personnel  
10 to support the Department’s land management re-  
11 sponsibilities. The Secretary shall determine the ap-  
12 propriate placement of such personnel within the ap-  
13 propriate agencies of the Department with major  
14 land management responsibilities. The Secretary  
15 may waive any limitation on the number of full-time  
16 equivalent personnel assigned to the Department  
17 and its constituent agencies in order to carry out the  
18 purposes of this section.

19           (2) TREATMENT; HIRING REQUIREMENTS.—  
20 Personnel hired pursuant to paragraph (1) shall  
21 be—

22           (A) in addition to any positions authorized  
23 before the date of the enactment of this Act  
24 and any existing vacancies within the Depart-  
25 ment on such date;

1 (B) part of the Competitive Service; and  
2 (C) hired in compliance with all applicable  
3 provisions of title 5, United States Code.

4 (c) LOAN REPAYMENT PROGRAM.—

5 (1) IN GENERAL.—The Secretary shall establish  
6 a program to provide educational loan repayment to  
7 qualifying individuals who agree to a term of em-  
8 ployment with the Department as Botanical Science  
9 Personnel.

10 (2) ELIGIBILITY.—To be eligible to participate  
11 in the loan repayment program under this sub-  
12 section, an individual shall—

13 (A) either—

14 (i) have a degree in botanical sciences;

15 (ii) be enrolled in an approved grad-  
16 uate training program in botanical  
17 sciences; or

18 (iii) be enrolled as a full-time student  
19 in an accredited educational institution,  
20 and in the final year of a course of a study  
21 or program, offered by such institution and  
22 approved by the Secretary, leading to a de-  
23 gree in botanical sciences; and

24 (B) submit to the Secretary an application  
25 for a contract described in paragraph (4).

1           (3) INFORMATION TO BE INCLUDED WITH AP-  
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-

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

7                   (B) OTHER TERMS AND CONDITIONS.—  
8                   Such contracts shall include all other necessary  
9                   and appropriate terms and conditions to clarify  
10                  the rights, obligations, and liabilities of the par-  
11                  ties.

12                  (5) REPAYMENT.—

13                  (A) IN GENERAL.—A loan repayment pro-  
14                  vided for an individual under a written contract  
15                  under the repayment program authorized by  
16                  this subsection shall consist of payment on be-  
17                  half of the individual of the principal, interest,  
18                  and related expenses on government and com-  
19                  mercial loans received by the individual regard-  
20                  ing the undergraduate or graduate education of  
21                  the individual (or both), which loans were made  
22                  for tuition, other reasonable educational ex-  
23                  penses, or reasonable living expenses, as deter-  
24                  mined by the Secretary.

1           (B) AMOUNTS.—For each year of obligated  
2           service that an individual contracts to serve, the  
3           Secretary may pay up to \$50,000 (plus, begin-  
4           ning with fiscal year 2020, an amount deter-  
5           mined 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  
11          any such loan for which payments are made to  
12          establish a schedule for the making of such pay-  
13          ments.

14          (6) EMPLOYMENT CEILING.—Notwithstanding  
15          any other provision of law, individuals who have en-  
16          tered into written contracts with the Secretary under  
17          this section, while undergoing academic or other  
18          training, shall not be counted against any employ-  
19          ment ceiling affecting the Department.

20          (d) DEFINITION.—For the purposes of this section,  
21          the term “Botanical Science Personnel” means individuals  
22          with post-secondary education in the field of botany, in-  
23          cluding plant ecologists and individuals with a bachelor’s  
24          degree in plant biology.

1 (e) AUTHORIZATION OF APPROPRIATIONS.—To carry  
2 out the purposes of this section, there are authorized to  
3 be appropriated—

4 (1) for fiscal year 2020—

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 2020,  
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.**

13 (a) POLICY.—In undertaking a land management ac-  
14 tivity on Federal lands under the jurisdiction of the De-  
15 partment of Agriculture or the Department of the Interior,  
16 including maintenance and restoration in response to deg-  
17 radation caused by human activity or natural events (such  
18 as fire, flood, or infestation), it is the policy of the United  
19 States that preference shall be made to the extent prac-  
20 ticable for the use of locally adapted native plant mate-  
21 rials.

22 (b) IMPLEMENTATION.—The Secretary of Agri-  
23 culture, acting through the Chief of the Forest Service,  
24 and the Secretary of the Interior, acting through the heads

1 of land management agencies of the Department of the  
2 Interior, shall—

3 (1) implement the policy established by sub-  
4 section (a) through appropriate administrative ac-  
5 tions; and

6 (2) specifically identify situations in which the  
7 use of nonnative plant materials may be warranted,  
8 including situations in which—

9 (A) emergency conditions require the pro-  
10 tection of basic resource values;

11 (B) an interim, non-persistent measure is  
12 needed to aid in the reestablishment of native  
13 plant species;

14 (C) native plant materials are not reason-  
15 ably available; or

16 (D) the plant community subject to the  
17 land management activity has been permanently  
18 altered.

19 (c) DISSEMINATION OF RECOMMENDATIONS FOR  
20 OTHER FEDERAL AGENCIES WITH SUBSTANTIAL LAND  
21 USE RESPONSIBILITIES.—The Secretary of Agriculture,  
22 acting through the Chief of the Forest Service, and the  
23 Secretary of the Interior, acting through the heads of land  
24 management agencies of the Department of the Interior,  
25 shall develop recommended activities for the Departments

1 of Defense, the Department of Transportation, and the  
2 Commissioner of the Public Buildings Service to under-  
3 take in order to incorporate to the extent practicable the  
4 use of locally adapted native plant materials in restoration  
5 and management of public lands and buildings funded by,  
6 or under the jurisdiction of, such agencies.

7 **TITLE III—AUTHORIZATION OF**  
8 **FEDERAL NATIVE PLANT MA-**  
9 **TERIALS RELATED ACTIVI-**  
10 **TIES**

11 **SEC. 301. INTERAGENCY PLANT MATERIALS EFFORTS.**

12 (a) **ACTIVITIES.**—The heads of the agencies shall col-  
13 laborate, as appropriate, regarding land use responsibility  
14 to undertake the following activities related to native plant  
15 materials:

16 (1) Identify seed needs and ensure the reliable  
17 availability of genetically appropriate seed.

18 (2) Conduct research to develop genetically ap-  
19 propriate seed and to improve technology for seed  
20 production and ecological restoration.

21 (3) Support land managers' ability to make  
22 timely and informed seeding decisions for ecological  
23 restoration.

1           (4) Efforts to enhance, protect, and restore  
2 plant materials necessary to support pollinators and  
3 dispersers.

4           (5) Efforts to coordinate activities aimed at  
5 sustaining and restoring public lands through the  
6 use of techniques and materials that promote to the  
7 extent practicable the use of locally adapted native  
8 plant materials.

9           (b) AGENCIES.—For the purposes of this section, the  
10 term “agencies” means the following:

11           (1) In the Department of the Interior, the fol-  
12 lowing:

13                   (A) The Bureau of Indian Affairs.

14                   (B) The Bureau of Land Management.

15                   (C) The National Park Service.

16                   (D) The United States Fish and Wildlife  
17 Service.

18                   (E) The United States Geological Survey.

19           (2) In the Department of Agriculture, the fol-  
20 lowing:

21                   (A) The Agricultural Research Service.

22                   (B) The Forest Service.

23                   (C) The National Institute of Food and  
24 Agriculture.

1 (D) The Natural Resources Conservation  
2 Service.

3 **SEC. 302. BUREAU OF LAND MANAGEMENT PLANT CON-**  
4 **SERVATION PROGRAM.**

5 (a) IN GENERAL.—The Bureau of Land Management  
6 is authorized to undertake activities to develop and use  
7 native plant materials.

8 (b) ACTIVITIES.—The following activities are within  
9 the scope of this authority:

10 (1) Identifying, evaluating, and protecting rare  
11 plants on public lands.

12 (2) Understanding the effects of human activity  
13 on native plant species and communities on public  
14 lands.

15 (3) Supporting efforts to develop genetically ap-  
16 propriate native plant materials for restoring and  
17 maintaining habitat for animal and plant species, in-  
18 cluding sage grouse, and monitoring the effective-  
19 ness of such materials.

20 (4) Ensuring that the needs of the agency for  
21 native plant materials are met.

22 (5) Developing seed transfer zones and guide-  
23 lines.

24 (6) Supporting public-private partnerships to  
25 catalogue and store plant materials.

1           (7) Coordinating a national network of seed  
2 storage warehouses.

3           (8) Implementing habitat conservation and res-  
4 toration on a landscape scale.

5           (9) Supporting public-private efforts, and volun-  
6 teer efforts to support plant conservation.

7           (c) AUTHORIZATION OF APPROPRIATIONS.—To carry  
8 out the purposes of this section, there are authorized to  
9 be appropriated—

10           (1) for fiscal year 2020, \$35,000,000; and

11           (2) for each fiscal year after fiscal year 2020,  
12 such sums as may be necessary.

13 **SEC. 303. NATIONAL FISH AND WILDLIFE FOUNDATION**  
14 **PLANT CONSERVATION PROGRAMS.**

15 The National Fish and Wildlife Foundation shall—

16           (1) ensure that a robust program of activities  
17 specifically focused on the conservation and protec-  
18 tion of native plants is incorporated into its existing  
19 programs and activities; and

20           (2) provide a report to Congress on its imple-  
21 mentation of this section.

○