

**Entomological Society of America
Proposal Form for New Common Name or
Change of ESA-Approved Common Name**

Complete this form and e-mail to pubs@entsoc.org.

Submissions will not be considered unless this form is filled out completely.

February 20, 2025

Esteemed ESA Common Names Committee members,

As the Chair for the Western Forest Insect Work Conference (WFIWC) Common Names Committee (CNC), I am pleased to present the following insect for your consideration:

Dendroctonus barberi Hopkins -- southwestern pine beetle

This proposal is part of a current effort to update the important publication [Western Forest Insects](#) and formalize common names used therein not yet recognized by ESA, or to propose new names for insects WFIWC membership believes warrants a common name.

Our committee also works with the Entomological Society of Canada and so you will find entries in our form that are in addition to those you require. All ESA questions are numbered and worded as found on your form.

If you have any questions or concerns about this or other submissions from our organization, we encourage you to contact us.

Sincerely,

/s/ *Brytten Steed*

Brytten Steed
WFIWC-CNC Chair
Brytten.steed@usda.gov

WFIWC Proposal Form for New Common Name or Change of ESA or ESC-Approved Common Name

I ask that the WFIWC Standing Committee on Common Names of Insects facilitate the submission of the following common name or name change to ESA and ESC.

1. Proposed new common name (English): [southwestern pine beetle](#), 1b. Proposed new common name in French (optional): [\(none\)](#)

2. Previously approved ESA common name (if any): [\(none\)](#)

2b. Previously approved English ESC common name (if any): [\(none\)](#)

2c. Previously approved French ESC common name (if any)-include direct translation to English: [\(none\)](#)

3. Scientific name (genus, species, author): [Dendroctonus barberi Hopkins](#)

Order: [Coleoptera](#)

Family: [Curculionidae: Scolytinae](#)

3b. List important previous scientific names (*esp. note if this scientific name is different from that noted in Western Forest Insects or in the literature cited*).

[D. barberi](#) was initially described by Hopkins (1909) but was considered a synonym of [D. brevicomis](#) by Wood in his revision of the genus [Dendroctonus](#) (Wood 1963). Recent work by Valerio-Mendoza et al. (2019) and others re-instates [D. barberi](#) to species status based on diverging DNA sequences, morphological characteristics, geometric morphometrics and pheromone composition.

Supporting Information

4. Please provide a clear and convincing explanation for why a common name is needed, possibly including but not limited to the taxon's economic, ecological, or medical importance, striking appearance, abundance, or conservation status:

[According to an early paper by Massey \(1961\), D. barberi is responsible for a significant amount of insect caused tree mortality in the forests of the southwestern USA. A common name is needed to facilitate communication with the public and \(or\) professional foresters that may be affected by or interested in this insect. D. barberi is included in the revision of Western Forest Insects \(Furniss and Carolin 1977\) a publication that is widely used by forest insect specialists throughout the western United States and Canada.](#)

[Wood \(1963\) synonymized D. barberi and D. brevicomis into one species, D. brevicomis. Recent work by a number of scientists support the original description by Hopkins \(1909\) that D. barberi is a separate species. Kelley et al. \(1999\) identified strong differentiation of mitochondrial DNA between the Dendroctonus species that occurs in the northwest and west and the species that occurs east of the Great Basin. Pureswaran et al. \(2016\). Identify strong differentiation of the aggregating pheromones for D. brevicomis from the west and the individuals from the southwest. Valerio-Mendoza et al. \(2019\) indicate that there are significant morphological differences between populations of D. brevicomis in the far west and the reinstated D. barberi.](#)

Since now two species are, once again, recognized, a common name that distinguishes *D. brevicomis* (western pine beetle) from *D. barberi*, is needed.

5. Stage or characteristic to which the proposed common name refers:
Adult

6. Distribution (*include author-year citations; full citation in #10b*):

D. barberi occurs in Arizona, southern Colorado, southern Nevada, New Mexico, western Texas and Utah in the United States. In Mexico, this insect occurs in the states of Chihuahua and Durango (Valerio-Mendoza et al. (2019).

7. Principal hosts (*include author-year citations; full citation in #10b*):

In the United States, the primary host of the insect is ponderosa pine, *Pinus ponderosa*. In Mexico, this insect also attacks *P. arizonica*, *P. ayachahuite*, *P. leophylla* and *P. tecote* (Valerio-Mendoza et al. 2019).

8. Please provide multiple references indicating clearly that the proposed name is already established and ideally widespread in use. If the name has been newly coined for purposes of this application, please state so:

The proposed common name was commonly used to refer to *D. barberi* before this species was considered a synonym of *D. brevicomis* (Keen 1952, Massey 1961).

9. Please identify any common names in use, including those used by indigenous peoples in the insect's area of origin, that have been applied to this taxon, other than the one herein proposed, with references. Please briefly describe the methods used to find alternative names and, if necessary, justify why each alternate name is inadequate: (*This entry is for English language names.*)

This insect was referred to as western pine beetle during the years it was considered a synonym of *D. brevicomis* (Furniss and Carolin 1977, DeMars and Roetgering 1982, Wood 1982).

9b. References using common names in a non-English language (give the common name in the non-English language and give the direct translation to English, if possible) (*use author-year citations; full citation in #10b*):

No other organisms identified

10. Please identify any other organisms to which your proposed common name could apply, giving careful consideration to closely related taxa. Please justify why the proposed common name is (i) unsuitable for each of those taxa and/or (ii) better suited for the proposed taxon:

None

10 b. List references cited in questions 6-10:

DeMars, C.J. and B.H. Roetgering 1982. Western pine beetle. USDA Forest Service, Forest Insect and Disease Leaflet 1, 8 pp.

Furniss, R.L. and V.M. Carolin, 1977. Western forest insects. USDA Forest Service, Miscellaneous Publication 1339, 654 pp.

Hopkins, A.D. 1909. Practical information on the scolytid beetles of North American Forests. I. Bark beetles of the genus *Dendroctonus*. USDA Bureau of Entomology Bulletin 83:1-169.

Keen, F.P. 1952. Insect enemies of western forests. USDA Miscellaneous Publication 273, 280 pp.

Kelley, S.T., J.B. Milton and T.D. Paine. 1999. Strong differences in mitochondrial DNA of *Dendroctonus brevicomis* (Coleoptera: Scolytidae) on different subspecies of ponderosa pine. *Annals of the Entomological Society of America* 92:193-197.

Massey, C.L. 1961. Biology of the southwestern pine beetle, *Dendroctonus barberi*. *Annals of the Entomological Society of America* 54:354-359.

Pureswaran, D.S., R.W. Hofstetter, B.T. Sullivan, A.M. Grady and C. Brownie. 2016. Western pine beetle populations in Arizona and California differ in composition of their aggregation pheromones. *Journal of Chemical Ecology* 42:404-413. <https://cfs.nrcan.gc.ca/publications?id=36886>

Valerio-Mendoza, O., J. García-Román, M. Becerril, F. Armendáriz-Toledano, G. Cuéllar-Rodríguez, J.F. Negrón, B.T. Sullivan and G. Zúñiga 2019. Cryptic species discrimination in western pine beetle, *Dendroctonus brevicomis* LeConte (Curculionidae: Scolytinae), based on morphological characters and geometric morphometrics. *Insects* 10: 377, 22 pp. (<https://www.mdpi.com/2075-4450/10/11/377>)

Wood, S.L. 1963. A revision of the bark beetle genus *Dendroctonus* Erichson (Coleoptera: Scolytidae). *Great Basin Naturalist* 23:1-117.

Wood, S.L. 1982. The bark and ambrosia beetles of North and Central America (Coleoptera: Scolytidae), a taxonomic monograph. *Great Basin Naturalist Memoirs* 6, 1359 pp.

11. Please document your efforts to consult with entomologists (including taxonomic specialists), colleagues, or other professionals who work with the taxon as to the suitability and need for the proposed common name. Please note that this is an important element of your proposal; proposals that do not document these steps are less likely to be successful:

A number of forest entomologists in the U.S. were contacted and asked to provide review comments to this proposal. The following individuals were contacted:

- Brian Sullivan, U.S. Forest Service, Pineville, LA, brian.sullivan2@usda.gov

No comment other than the proposal looks good.

- Jose Negron, U.S. Forest Service, Fort Collins, CO, jose.negron@usda.gov

Added two minor editorial comments.

Both of the above reviewers are co-authors of Valerio-Mendoza et al. 2019

Sent to the Western Forest Insect Work Conference membership in April 2023. Additional reviewed by a number of Forest Health professional entomologists of the Common Names Committee of Western Forest Insect Work Conference including:

-Iral Ragenovich, U.S. Forest Service, Portland, Oregon, iral.ragenovich@usda.gov

Added text to section 4 and several references.

-Bob Rabaglia, U.S. Forest Service, Washington, DC, bob.rabaglia@usda.gov

"This looks good to me." No comments other than I thinks it's a good new/old name."

-Lee Pederson, U.S Forest Service, Missoula, MT. lee.pederson@usda.gov

Suggested adding hyperlinks to the literature cited. Hyperlinks were added to more recent literature.

11b. What type of literature searches/checks did you conduct (e.g. CABI, ESA and ESC web pages, USDA FS library, formal library search engine-list, etc.)

- Search on ESA Common Names site (<https://entsoc.org/publications/common-names/>) to determine if this species had a common name, if the common name belonged to another species.
- Review of the ESC Common Names site (<https://esc-sec.ca/entomology-resources/common-names/>) to determine if this species had a common name in either English or French, or if the English common name proposed belonged to another species.
- Search of www using the Google search engine

(southwestern pine beetle)
2023-04-01

(*Dendroctonus barberi* Hopkins)

02/20/2025

- Search of personal literature files
- See list of citations in #10

12. Proposed by: Western Forest Insect Work Conference group (WFIWC), Common Names Committee
Chair – Brytten Steed

Proposal prepared and submitted to the WFIWC CNC by William Ciesla

E-mail: Brytten.steed@usda.gov

Telephone: [REDACTED]

Address: [Brytten Steed / USDA FS – Forest Health Protection / 26 Fort Missoula Road / Missoula MT, 59804](#)

Date: 20 February