

How to Submit a Taxonomy Proposal

This section is copied from Title 430 – National Soil Survey Handbook
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614.5 Procedures for Amending Soil Taxonomy

A. Soil Taxonomy is a dynamic system for classification of soils. It is designed to be open-ended, permitting the addition of diagnostic features and classes that help explain the pedogenic history and broad interpretative qualities of soils. Inferred taxonomic classes are not added until they are actually described and documented.

B. Recommendations for amending Soil Taxonomy must be fully developed and documented prior to submission to the National Leader for Soil Survey Standards. Established guidelines are followed in proposals and the submission of proposals as well as in the evaluation and testing. Proposals that meet requirements and are approved are drafted into amendment form and posted for open review and comment. Based upon review comments, the proposal is adopted and integrated, rejected, or sent back for further development and documentation. Part 614, subpart B, section 614.10, illustrates the processing of proposals to amend Soil Taxonomy. (see Table of Contents link above)

C. Considerations in Proposing Amendments to Soil Taxonomy

- (1) An amendment should address questions of soil classification, including diagnostic features, diagnostic criteria, and taxonomic classes through the family level.
- (2) An amendment should add value and clarity to Soil Taxonomy, or accommodate needed classes as discovered.
- (3) An amendment should be based upon soil properties that can be observed or measured and serve as the basis for diagnostic criteria.
- (4) An amendment should be placed logically within the Soil Taxonomy hierarchy (i.e., within the order, suborder, great group, subgroup, family, or series).
- (5) Definitive diagnostic criteria should be developed and defined.
- (6) The impacts or consequences to the overall system of Soil Taxonomy should be considered. For example—
 - (i) Does the amendment provide clarity to the classification system or improve interpretative value?
 - (ii) Will the amendment require excessive modifications throughout the Soil Taxonomy system, affecting a large number of taxa or series?
 - (iii) Will the amendment impact existing State or Federal regulations or statutes?
 - (iv) Can the amendment be implemented readily?

D. Submitting Proposed Amendments

Proposals may be made by anyone using Soil Taxonomy from within or outside the United States. Proposals should be submitted to the National Leader for Soil Survey Standards. This individual

determines routing to the appropriate regional Soil Taxonomy committee chairs and ICOMTAX. Send proposals to the National Leader for Soil Survey Standards at the National Soil Survey Center, Federal Building, Room 152, 100 Centennial Mall North, Lincoln, NE, 68508-3866. Proposals may be surface mailed or sent as attachments in email messages. (See the National Soil Survey Center directory for the current email address of the National Leader for Soil Survey Standards at [National Soil Survey Center](#)).

E. Documenting Proposed Amendments

(1) Criteria for New Taxa Above the Family Category.—The minimum supporting evidence for all proposed classes must include pedon descriptions, the impact on interpretations, an estimate of geographical extent, and certain laboratory data. Laboratory data is required for at least the critical parts of diagnostic horizons in the proposed new class if the limits between the proposed class and the other recognized classes cannot be adequately identified using field criteria alone.

(2) Criteria for a New Class in the Family Category.—The minimum supporting evidence includes about 10 pedon descriptions or a description of a proposed soil series and the expected impact on interpretations for the intended use. Laboratory data is required for at least the critical parts of the proposed new class if the limits between the proposed class and the other recognized classes cannot be adequately identified using field criteria alone.

(3) Support of the Review Process.—Proposals should include the following materials:

- (i) Soil and site descriptions, as appropriate to support the proposal
- (ii) Definitions of new terminology
- (iii) Analytical results using procedures in SSIR #42 (Laboratory Methods Manual)
- (iv) Graphics, illustrations, maps, and photos
- (v) Citations and technical references
- (vi) Justification of metrics and limits for the classes or differentiae being proposed
- (vii) Brief analysis of improvement to soil survey maps, data, and descriptions relative to use and management of soil or improvements to soil science procedures and processes in general
- (viii) Brief analysis of geographic extent or application of the proposal
- (ix) If appropriate, brief analysis of impacts to NCSS soil survey standards and procedures, such as the Keys to Soil Taxonomy and Soil Survey Manual

F. Evaluating Proposed Amendments

(1) The National Leader for Soil Survey Standards, located at the National Soil Survey Center, circulates the proposed amendment to NCSS cooperators and ICOMTAX for review. Proposed amendments are also posted online on the Soil Taxonomy web page (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053577) under the heading “Proposals to Amend Soil Taxonomy.” Review and comment are welcome from any interested cooperators. Those who are current members of the regional taxonomy committees have a special obligation to review and comment on proposals. Appropriate review recommendation would be for approval without change, approval with change, or rejection. Notes of discussions and reasoning for the recommendation should also be given.

(2) The National Leader for Soil Survey Standards evaluates all proposals from the international committees and other proposals that originate outside the United States, arranges a review of these proposals by cooperators or work groups and by ICOMTAX, and determines disposition for proposals.

(3) If a significant proposal is rejected, the originator is typically sent recommendations for improving the amendment for a future resubmission. Rejected amendments may be appealed to the Director of the Soil Science Division for reconsideration.

(4) Recommendations to change or reject the proposal are documented. The National Leader for Soil Survey Standards reviews the recommendations and either makes a decision to return the proposal to the originator with reasons for the rejection or includes the proposal in a transmittal (by email or surface mail) to the chairs of the regional soil taxonomy committees and ICOMTAX.

(5) If the proposal is accepted and concurred by the Director of the Soil and Plant Science Division, it is incorporated into Soil Taxonomy and related standards documents.

(6) The Deputy Chief for Soil Science and Resource Assessment in NRCS issues a national bulletin to announce changes to the Keys to Soil Taxonomy or Agriculture Handbook 436 (Soil Taxonomy). Issuance of this bulletin gives the final official approval for the changes.

G. Distributing Amendments

The publication of proposed amendments constitutes final approval. New editions of the Keys to Soil Taxonomy and Soil Taxonomy include these amendments. All soil scientists of NCSS and other soil scientists, both national and international, receive new editions of these documents.