

California Native Plant Society

Professional Botanist Certification Program

Guidelines and Requirements

Draft Proposal of 26 August 2002

Defining a Standard

Since the 1960's, botanists have been actively involved in setting environmental policy and influencing decision-making in our society. Private environmental companies, public environmental and natural resource agencies, and applied research laboratories and institutions offer major employment opportunities for botanists. Academic botanists not only teach the students who often fill those positions but also often provide teaching or testimony on botanical matters.

The professional botanist certification program of the California Native Plant Society, begun in 2002, recognizes botanists who seek to incorporate botanical principles in decision-making, who meet a minimum set of standards in education and experience, and who adhere to high ethical standards. Over the years, it has become clearer that a formal identification of minimum standards for botanists is needed and that society needs, welcomes, and now recognizes the CNPS Botanist Certification Program as a means of identifying well-trained, competent, and reliable professionals. Certification is now recognized and used in Minnesota as a requirement for those carrying out wetland delineations in that state. Several major consulting firms strongly encourage their botanists to seek certification as a means of professional development and promotion. Formal certification will be important for many botanists involved in expert witness testimony in courts and in Congress. The most important reasons for supporting certification of botanists is simple - certification will define the standards and formally identify the profession.

Goals and Function

The goals of certification program are to:

- Foster the incorporation of botanical principles in the decision-making process of the California Native Plant Society (CNPS)
- Establish widely accepted standards of proficiency and professionalism that guide the training, development, and performance of botanists
- Develop and present relevant professional training; and
- Catalyze the establishment of needed courses and training in the formal academic arena.

To meet these goals, CNPS recognizes individuals whose education, training, and experience meet the established standards of the profession as developed by CNPS. The CNPS certification program provides ready access to professional botanists for advice and technical guidance on public policy and regulatory issues facing CNPS. Though certification does not guarantee the competence of individuals to address specific matters, CNPS attests that certified members have met minimum education and experience requirements for various certification levels. Each certified member also acknowledges adherence to the CNPS Botanist's Code of Ethics.

Objectives

The objectives of the Botanist Certification Program are to:

1. Serve the needs of botanists who wish to establish and validate their professional credentials.
2. Guide biologists, government agencies, courts, and the public in defining minimum standards of education and experience for professional botanists, and to encourage all practicing botanists to meet such standards.
3. Create and maintain public confidence in the advice and opinions of Certified Botanists as well as educated and experienced professionals who have pledged to uphold the Code of Ethics of the California Native Plant Society and to act in the best interest of the public.
4. Assist the public in identifying botanists by establishing a procedure for critical peer evaluation based upon defined minimum education, experience, and ethical requirements.

Requirements for Eligibility

Education and Experience

Candidates must hold a bachelor's degree that includes the equivalent of at least 30 semester hours of botanical science with at least 9 semester hours of botany, and at least 12 semester hours of physical and mathematical science. Undergraduate requirements may be met in graduate programs but should be documented. Graduate degrees must include an introduction to three major areas of botanical inquiry: taxonomy, communities, and ecosystems. Formal academic education may be substituted with satisfactory equivalent professional experience and a demonstrated proficiency in the field of botany.

Levels of Certification

CNPS offers three levels of Professional Botanist certification: Associate Botanist, Botanist, and Senior Botanist. Minimum academic education, professional training, competency, and experience requirements for each level are detailed below.

ASSOCIATE BOTANIST

Minimum requirements for certification as an Associate Botanists shall include:

1. Successful completion of a bachelor's or higher degree in botany or a related science from an accredited college or university. Required coursework includes (3-semester-units each): Botany, Botanical Taxonomy/Plant Identification, Plant Systematics, Ecology, Field Botany, Genetics, and Biometrics/Statistics.
2. At least one year of post-graduate professional experience gained in the performance of research or development of methods demonstrating technical competence in the current application of botanical principles and/or theory to decision-making. Professional training shall include courses in at least six of the eight following topics (Environmental Law & Policy, Impact Assessment, Survey Methods, Assessment Tools, Mitigation Measure Specification and Evaluation, Habitat Restoration, Vegetation Classification-Mapping & Assessment, Report Preparation) and at least two courses in the following topics (Plant Identification, Ecology, Land Management Practices, Wetlands).

3. A course in Ethical and Legal Standards (or equivalent) must also have been completed successfully.

“Professional training” requirements may be met by appropriate post-graduate/continuing-education coursework, or training offered by federal or state agencies, institutes, herbaria, and professional/conservation organizations (including CNPS).

An Associate Botanist would be qualified to participate in all phases of botanical surveying, impact analysis, and reporting, while supervised by a CNPS Certified Botanist or Senior Botanist.

BOTANIST

A Botanist must demonstrate satisfaction of the requirements for an Associate Botanist and:

- a) Successful completion of a master's or higher degree in botany or a related science from an accredited college or university, and at least three years of full-time equivalent professional experience after degree, OR
- b) At least 5 years of professional experience, to the satisfaction of the Botanist Certification Board.

In addition to experience required for Associate Botanist, demonstration of ability to perform professional work in botany such as independent studies, complex data analyses, and formulation and testing of hypotheses must follow completion of the Master's Degree or the degree level used to qualify for Botanist's level. A Botanist would be qualified to conduct all phases of environmental assessment work and to supervise the work of Associate Botanists.

SENIOR BOTANIST

A Senior Botanist must demonstrate satisfaction of the requirements for a Botanist and:

- a) Successful completion of a doctoral degree in botany or a related science from an accredited college or university, and at least five years of professional experience, OR
- b) At least 10 years professional experience in addition to the education requirement for Botanist.

Additional experience necessary to qualify at this level includes demonstration:

- a) In work output, of thorough knowledge of the literature, scientific principles and theories of botany;
- b) Of written original contributions or original interpretation of botanical information; and
- c) Of technical or organizational competence as evidenced by supervision of projects.

An applicant who does not qualify under the above criteria may submit a statement to the Board of Professional Certification explaining why and how the intent of the education and experience requirements is satisfied.

Ethics and Professional Conduct

Certified Botanists (at all levels) shall conduct their activities in accordance with the Botanist's Code of Ethics of the California Native Plant Society and with the highest standards of professional conduct and personal honor. Those who subscribe to the Code of Ethics are eligible for certification, provided they meet minimum education and experience requirements.

Appeals Procedure

A decision of the Board of Professional Certification to deny certification may be appealed in writing to the CNPS Executive Director. Details of the procedure (to be developed) are available upon request.

Disciplinary Procedure

The Board of Professional Certification, with approval of the Professional Ethics Committee, shall have the authority to censure a certificant, to suspend certification for a stated period, or to revoke certification on the finding that an individual has willfully violated the Code of Ethics or misrepresented the facts at the time of certification. Such a finding may be reached by concluding that an allegation of improper deportment is true.

Such an allegation may be presented to the Board in writing, by any member of the California Native Plant Society. Anonymous allegations will not be entertained. Anyone named a party to such proceeding shall be informed in a timely manner of the evidence brought forward and be given an opportunity to respond to the allegations. The Board will forward all material to the Professional Ethics Committee. After review of the case by the Committee and the Board, the Board will render a written decision informing the certified botanist, the individual who initiated the allegation, and the Board of Directors. Any such action of the Board may be appealed to the Board of Directors, whose decision will be final.

Application Procedure

An Application for Certification may be obtained from the California Native Plant Society, Board of Professional Certification. Applications must be completed in their entirety and include two letters of recommendation, three references, a current résumé, and the application fee. All applications must be received by February 1. Certification will be confirmed or denied within three months of the deadline date unless the Board advises the applicant that additional time is needed for review. After five years, all certified botanists will be asked to apply for recertification. An application for recertification can be obtained by contacting CNPS. Recertification at a higher level than previously certified requires the submission of a new Application for Certification. The application fee will include first year membership dues.

Application Fees

	Member	Non-Member
Associate Botanist	\$75	\$150
Botanist:	\$125	\$250
Senior Botanist:	\$125	\$250

Certification Maintenance Fee

An annual fee must be paid to maintain certification. The annual certification fee shall be due by February 1 of each year to maintain CNPS Botanist Certification. The fees shall be \$75 per year and include the following benefits:

- Full regular membership in CNPS
- Membership in a CNPS chapter of your choice
- Quarterly journal - *Fremontia*
- Quarterly professional botanist's journal – *The California Professional Botanist*
- Register of California certified botanists
- Discount (10%) on all CNPS publications
- Certificate as a Certified Associate Botanist/Botanist/Senior Botanist
- Certification number
- Discount (25%) on all CNPS botany training workshops, seminars, and conferences
- Borrowing privileges from CNPS library

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