

Licensing of Soil Scientists in North Carolina

H. J. Byrd

Soil Scientist (retired), Soil Conservation Service, North Carolina

H. J. Kleiss

Professor of Soil Science, North Carolina State University

The year 1995 marked an important accomplishment in the recognition of soil scientists when the General Assembly passed an act to provide for the licensing of soil scientists. As of July 1999, over 230 soil scientists from 18 states have been approved for licensing and 25 are currently in an in-training status. North Carolina joined a select group of only seven states with legislated licensing recognition for soil scientists. Licensing over 200 soil scientists in less than four years is a significant accomplishment. Reaching this goal, however, did not come easily.

Discussions of licensing by soil scientists began in the early 1970s. Most of the initial deliberations were among members of the Soil Science Society of North Carolina. The minutes of the annual meetings of this group reflect this theme and strong desire to recognize the profession. A bill was finally drafted for such a statute in 1977. The timing for such a bill, however, proved to be wrong politically and otherwise. The Attorney General expressed concern for the proliferation of occupational licensing and challenged the documentation relative to the public need for such a statute. The bill could not be passed over objections from the Attorney General's office.

The interest in some form of certification program for soil scientists was not diminished by the initial lack of success in the legislature. Under the auspices of the Soil Science Society of North Carolina, plans were put into action to develop a certification program that would recognize the unique soil science training and expertise of the profession. In 1979, the North Carolina Registry of Certified Professionals in Soils was established, and the President of the Soil Science Society of North Carolina appointed a rotating board.

Over the next 15 years, this certification program served to elevate the soil science profession. A published directory of the membership was circulated to various state and local agencies that were responsible for implementing various regulatory programs where soil reports were required. The registry grew to over 50 members and provided a valuable resource for anyone needing the services of a soil scientist.

Since the registry was only a certification program administered by the Soil Science Society, it did not, however, meet the same standards of professional credentials as other

professions that were recognized with a state statute. Impetus began to grow from a core of registry members for another attempt at a licensing statute. The effort was given important support and encouragement from related professional groups who felt that the soil science specialty should assume its own statutory responsibility.

In 1993–94, a major campaign was initiated to generate contributions for a fund to hire a lobbyist to assist in the effort of shepherding a bill through the General Assembly. Representative Arlie Culp, a former employee of the Soil Conservation Service, agreed to sponsor the bill in the House. Many people assisted in contacting their legislators and in attending committee meetings and hearings in the legislature. Support was gathered from the engineering and geology professionals. Documentation of examples relative to protecting the public welfare were developed and were especially focused on waste disposal issues. The existence of the 15-year registry of soil scientists organized by the Soil Science Society provided valuable support for the cause. The involvement of the State in the failure of a couple of large community-sized ground absorption septic disposal systems provided important fuel for raising the soil issue to a level that attracted the attention of the legislature. In 1995, the House bill was passed with only a few dissenting votes. Approval followed in the Senate and the statute was ratified July 11, 1995.

As defined in G.S. 89F, the practice of soil science means any service or work the adequate performance of which requires education in the physical, chemical and biological sciences, as well as soil science; training and experience in the application of special knowledge of these sciences to the use and management of soils by accepted principles and methods; and investigation, evaluation and consultation; and in which the performance is related to the public welfare by safeguarding life, health, property and the environment. ‘Practice of soil science’ includes, but is not limited to, investigating and evaluating the interactions among water, soil, nutrients, plants and other living organisms that are used to prepare reports for subsurface ground absorption systems, including infiltration galleries; land application of residuals such as sludge, septage and other wastes; spray irrigation of wastewater; soil remediation at conventional rates; land application of agricultural products; processing residues, bioremediation, and volatilization; soil erodibility and sedimentation; and identification of hydric soil and redoximorphic features.

The Governor, the Senate and the House appoint members of the North Carolina Board for Licensing of Soil Scientists in the statute. The seven members are affiliated as follows:

1. One member appointed by the Governor, who shall be a soil scientist employed by a federal or State agency.
2. One member appointed by the Governor, who shall be a soil scientist employed by a local government agency.
3. One member appointed by the Governor, who shall be a soil scientist employed by an institution of higher education.

4. One member appointed by the General Assembly upon recommendation of the Speaker of the House of Representatives, who shall be a soil scientist who is privately employed.
5. One member appointed by the General Assembly upon recommendation of the Speaker of the House of Representatives, who shall be a member of the public who is not a soil scientist.
6. One member appointed by the General Assembly upon recommendation of the President *Pro Tempore* of the Senate, who shall be a soil scientist who is privately employed.
7. One member appointed by the General Assembly upon recommendation of the President *Pro Tempore* of the Senate, who shall be a member of the public who is not a soil scientist.

In addition to the members described above, the President of the Soil Science Society of N.C., or a member of the Society appointed by its President, shall serve as a nonvoting *ex officio* member of the board.

Appointment of the first Board was completed late in 1995. The rule-making process was undertaken and after several attempts and adoption of temporary rules, Chapter 69 Board for Licensing of Soil Scientists Title 21 Occupational Licensing Board of the North Carolina Administrative Code was approved by the Rules Review Commission and became fully effective April 1, 1997. Under this clause, applicants who met the education requirements and the practice experience could be licensed.

The statutory opportunity for granting a license without a written examination kept the Board busy for the first year as many applicants took advantage of the grandfather clause. This opportunity ended in November 1996 after which written examinations were required of all applicants.

Development of a written examination was a major concern for the Board. Quite fortuitously, however, the Soil Science Society of America was simultaneously exploring the preparation of such an exam that could be used on a national basis. This society appointed a 30-member Council of Soil Science Examiners representing all the major subdisciplines of soil science. This group meets biannually to write exam questions. Three members are presently from North Carolina. The written examinations involve two parts. The fundamental exam is taken after completion of the B.S. degree and 15 semester hours of soil science course work. Successful completion of this exam allows an individual to be granted an in-training status. After three years of mentored practice in soil science, a professional practice exam must be successfully completed.

The Board meets quarterly to review applications and conduct necessary matters for implementing the statute. Written communication can be addressed to the North Carolina Board for Licensing Soil Scientists, P.O. Box 5316, Raleigh, NC 27650-5316. Information about the program can be found on the Internet at www.soil.ncsu.edu/ncblss.