

## **Maine is the first state to pay tribute to soils during the International Year of Soils**

The Maine legislature is the first in the nation to pay tribute to soils during the historic United Nations [International Year of Soils](#). The soil beneath our feet is often overlooked, but the adoption of the **Joint Resolution Recognizing the Importance of Soils to Maine's Future Prosperity** ([read full text of HP-584](#)), sheds light on all the ways soils impact our lives. Clean water, abundant forests, productive agriculture, and a way of life rooted in natural resources and the outdoors all depend on soils. Representative Joan Welsh (D-Rockport) sponsored and introduced the resolution, which was co-sponsored in the Senate by Tom Saviello (R-Franklin), who studied forest soils for his doctoral degree from the University of Maine.

Too often, soils only reach the public consciousness when something goes terribly wrong, like the Dust Bowl or the Dead Zone in the Gulf of Mexico. Crises from mismanagement bring attention to degraded or polluted soils, but many of the positive things healthy soils do every day, known by scientists as ecosystem services, go unnoticed and unappreciated. Ivan Fernandez, professor of soil science at the University of Maine, has highlighted the role of Maine's soils in combating and adapting to climate change. The soils in Maine's forests, for example, have approximately twice as much carbon as the trees themselves. Healthy soils can act as a carbon sink, facilitating productive forestry and farming. Degraded soils, on the other hand, release carbon into the atmosphere and lead to decreased productivity over time. Healthy soils can also help mitigate the impacts of extreme storm events by efficiently storing and filtering water.

Co-sponsor Representative Craig Hickman (D-Winthrop), an organic farmer, spoke in the House of the tremendous biological resources in soil that are still largely unexplored and poorly understood. Among these resources are organisms that can break down toxic compounds, organisms that cycle nutrients, and microbes that can contribute to human health. Recently, scientists from Northeastern University used a new method to isolate a bacterium from a sample of Maine soil that fights infections but does not lead to antibiotic resistance. Development of this technology would be a huge step forward for public health.

Don Phillips, president of the Maine Association of Professional Soil Scientists ([MAPSS](#)), hopes the resolution will draw attention to the importance of soils and to soil science as a career. Some Maine students have been introduced to the joy of investigating and interpreting the textures, colors, and horizons (layers) in a soil pit through participation in the [Envirothon](#). MAPSS members have noticed at their [Common Ground Fair](#) booth every year that there is increasing interest in soils from young farmers. There are myriad applications of soil science, from environmental science careers to farming, forestry, and even archaeology. Phillips and colleagues hope more students will dig a little deeper to discover soils.