

Testimony to Natural Resources, Environment and Great Lakes Committee on Senate Bill 78

Dear Senator Casperson and members of the committee, thank you for allowing me to testify today.

My name is Judy Kelly and I am a Biology professor at Henry Ford Community College in Dearborn Michigan where I teach Environmental Science. I am also the president of a statewide conservation club, called the Michigan Botanical Club. We are the native plant society for Michigan and were founded in 1941. Our focus is:

- Conservation of all native plants.
- Education of the public to appreciate and preserve plant life.
- Sponsorship of research and publication on the plant life of the State.
- Sponsorship of legislation to promote preservation of Michigan native flora.
- Establishment of suitable sanctuaries and natural areas.
- Cooperation in programs concerned with the use and conservation of all natural resources and scenic features.

What is biodiversity?

Biodiversity is the variety of living organisms, the genes they possess, the ecosystems in which they live and the ecosystem processes of energy flow and nutrient cycling that sustain all life.

The earth's biodiversity is a vital part of the natural capital that keeps us alive and supports our economies. With the help of technology, we use biodiversity to provide us with food, wood, fibers, energy from wood and biofuels, and medicines.

Biodiversity also plays critical roles in preserving the quality of the air and water, maintaining the fertility of topsoil, decomposing and recycling waste, and controlling populations of species that humans consider to be pests.

In carrying out these free ecological services biodiversity helps to sustain life on the earth.

Biodiversity is so important that the textbook I use to teach environmental science has 8 chapters covering various aspects of biodiversity. A core concept of environmental studies is the precautionary principle – that we should retain all parts of a system so you can understand how they work together.

Why MBC opposes State Bill 78

The Michigan Botanical Club opposes State Bill 78. We feel the proposed legislation has deep and serious flaws. We oppose the proposed revisions to the Natural Resources and Environment Protection Act (Act 451 of 1994).

We oppose Senate Bill 78, because it is environmentally harmful in ways that ultimately diminish both our economy and quality of life in Michigan. Michigan tourism economy thrives in large part because of the Michigan's well earned reputation for preserving and maintaining a diverse range of high quality natural areas.

Preservation of these environments is dependent upon restoring and maintaining their biodiversity. People come to Michigan to savor the splendors of the forests and lakes whose diverse environments are in sharp contrast to fields of corn or pine plantations.

Likewise, for those of us who call Michigan our home, the quality of our daily life depends upon maintaining biodiversity. Since the terrible fires that burned across Michigan in the early 20th century scientists and the DNR have come to understand that restoring and preserving biodiversity is the key to a healthy and sustainable environment.

It is central to the over-all health of our natural areas as well as enhancing multiple use of these resources. The DNR's remarkable success in restoring our forests, lakes, and watersheds from the desolate landscapes over the past 100 years, I believe illustrates the wisdom of incorporating biodiversity as an important element in restoration and sustaining a healthy environment.

It is imperative that the DNR use all the available tools and knowledge to insure our public lands are managed for the long term and not subjected to the destructive extraction of natural resources and the tax payer left to foot the bill to fight fires, restore damaged woodlots, and reclaim lake and rivers.

My experience in living in other states, such as Ohio, Kentucky and New Jersey, makes me acutely aware of the outstanding variety of native plants and animal species unique to Michigan. Great natural resources are one of the reasons Michigan is a tourism destination.

We of the Michigan botanical club are so proud of Michigan's biodiversity that we plan and lead field trips all over the state, open to members of the public, to view and enjoy our natural heritage.

Every Memorial Day weekend we have a spring foray to a particular location in the state, where we spend money for food and lodging which assists in maintain the tourism industry in the state. We inject thousands of dollars into small local towns such as Rogers City, St. Ignace, Berglund, Drummond Island, and Ludington.

Why should we care about biodiversity?

- First, because it has intrinsic value - that is we should save it because it exists, regardless of its usefulness to humans.
- Second, it has instrumental value- that is, its usefulness to us.

It is estimated that humans have disturbed 50-83% of the earth's land surface (excluding Antarctica and Greenland). Population growth, economic development and poverty are exerting increasing pressure on terrestrial and aquatic ecosystems, resulting in loss of biodiversity.

According to biodiversity expert Edward O. Wilson, "The natural world is everywhere disappearing before our eyes - cut to pieces, mowed down, plowed under, gobbled up, replaced by human artifacts."

Surveys indicate that humans have destroyed about 50% of the world's forests. If current rates of deforestation continue, 40% of the remaining forests will be destroyed in the next 20 years.

Forests provide economic services such as fuel wood, lumber, pulp to make paper, mining, livestock grazing, recreation and jobs. However, often overlooked are the ecological services that forest provide, such as supporting energy flow and matter cycling, reducing soil erosion, absorbing and releasing water, purifying air and water, influencing local and regional climate, storing carbon, and providing numerous wildlife habitats.

Deforestation leads to harmful environmental effects, which include decreased soil fertility from erosion, runoff of eroded soil into aquatic systems, premature extinction of species with specialized niches, loss of habitat, regional climate changes, release of carbon dioxide to the atmosphere, and acceleration of flooding.

In Northern Michigan is a state forest known as the Pigeon River State Forest because of the great number of passenger pigeons that nested there at one time. But now they are biologically extinct. The last one died in the Cincinnati Zoo in 1914.

Why save endangered species?

One reason is due to their intrinsic value - the right of other species to exist separate from their usefulness to humans. Another reason is due to their instrumental value- their value to humans.

In Michigan we have a number of federal endangered species. These are species that are rare across the United States. We have a bird known as Kirtland's warbler and the gray wolf.

The basic causes of premature extinction of wild species is poverty, a lack on environmental accounting, rising resource use, and human population growth. These cause habitat loss, habitat degradation and habitat fragmentation.

We of the botanical club agree with Adlo Leopold, a famous ecologist when he said "The last word in ignorance is the person who says of an animal or plant: "What good is it?"

As my observations attest, we are passionate about Michigan and its future. We want to see our public forests and lakes be here for now and for generations to come. To insure this happens, we must make wise decisions based upon the best science , which includes recognizing the elemental value that biodiversity supports in the health of our ecology and economy.

Thank you.