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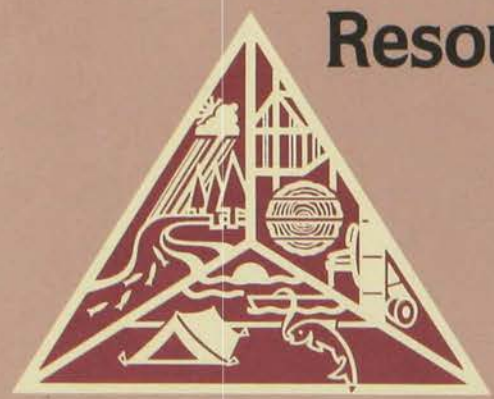
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Focus On Natural Resources

A Statement
of Direction and Priorities
for Minnesota Extension Service

in Natural Resources



Minnesota Extension Service, University of Minnesota

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Extension Natural Resources is strengthening our natural resource base through education

Improving your economic benefit from natural resources

- new products and industries
- more jobs
- stable local economies

Managing natural resources for future generations

- clean air and water
- soil conservation
- ongoing harvest of natural resource crops

Increasing your enjoyment of natural resources

- recreational activities
- fish and wildlife
- lakes, forests, and streams

Natural Resources Are Vital to Our Quality of Life

▲ Many things contribute to “quality of life,” including economic stability, job opportunities, health care, education, the arts, and recreation.

Can we put a price tag on the contribution of our natural resources to “quality of life?”

We can use numbers to talk about economics and jobs: 52,000 jobs and \$1.5 billion in annual wages from the forestry industry in Minnesota; over \$2 billion in tourist dollars in greater Minnesota; \$7 billion in gross farm income.

We can also use numbers to talk about recreation: 2 million fishing licenses; 11,700 miles of recreational trails; nearly 12,000 lakes; the largest wilderness area in the eastern United States.

But numbers don't tell the whole story. They don't begin to describe the brilliance of our fall colors, the excitement of a ten-pound walleye on the line, the beauty of a sunrise on Lake Superior, the fun of a family camping trip.

The dollar value of natural resources in Minnesota's economy is considerable. The contribution to our quality of life is even greater: it is priceless.

The Role of Extension Natural Resources

The triangle in the corner of this page represents our goals for Minnesota's natural resources: economic benefits, management, and enjoyment.

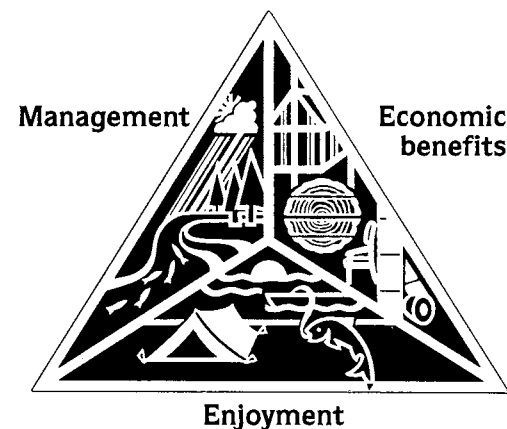
In the drawing, the three parts are balanced to form an even, regular triangle. This represents our approach: increasing the economic return from natural resources, yet always balancing economic gain with long-term management efforts and opportunities for people to enjoy nature.

These goals are achieved through education. Extension provides Minnesotans with the knowledge and skills to make informed decisions and improve their lives. Our research-based information is unbiased and up to date.

Our effectiveness is enhanced by working in partnership with other natural resource agencies and organizations. These include the Department of Natural Resources, U.S. Forest Service, Minnesota Forestry Association, Minnesota Forest Industries, and others.

Extension Natural Resources is committed to providing lifelong learning opportunities. We design our programs to meet your natural resource problems and opportunities.

When you need us, we'll be there.



Minnesota Extension Service

▲ There are several parts to the Minnesota Extension Service: Agriculture, Home Economics, 4-H Youth Development, Community Economic Development, and Natural Resources.

The **Focus on People** brochure outlines the overall goals for all these areas. Minnesota Extension Service has a new name and a new direction. Formerly called Agricultural Extension Service, the new name reflects a commitment not only to agriculture, but also to the families, youth, and communities of Minnesota.

Regardless of the name, the purpose is to educate people in a very practical way where they live and work. The new direction is to focus programs and priorities around current critical issues, rather than around geographic location, subject matter, or organizational boundaries.

Things will be done because they **need** doing. There will be increased ability to respond quickly as issues emerge. Team efforts across program areas will produce practical, timely educational programs.

Minnesota Extension Service will continue to concentrate efforts on rural Minnesota. However, the new focus means that non-farm and urban people will also benefit. Extension cannot be "all things to all people." But it seeks to be **some** things to **most** people in Minnesota.

The focus will be on those issues of greatest concern to Minnesotans; issues where Extension has competence; issues where Extension can make a significant contribution.

Central Issues of Extension

▲ The Minnesota Extension Service defines its focus in terms of four central issues that affect the lives of state residents. Within each issue, Extension deals with immediate concerns of people in their day-to-day living. It also strives to develop people's leadership abilities and to shape public policy.

All the parts of Extension, including Natural Resources, will focus their resources on these central issues:

I. Economic Development

Programs will focus on the improvement of the agricultural system, and on other related areas of economic development: forestry, recreation, rural businesses, tourism, and energy production.

II. Environment and Natural Resources

The challenge is to balance natural resource management and economic activity with conservation, productivity, and environmental concerns.

III. Human Development

A rapidly changing social and economic structure calls for programs addressing the needs of people: career and life changes, family resources, communication, housing and energy use, nutrition and health, safety, and vital needs of youth.

IV. Community Leadership

In the complex society of tomorrow, there is an increasing need for programs to develop community leadership: participation in government, public decision making, emerging leadership, rural restructuring and youth as a resource.

Mission of Natural Resources

▲ Extension Natural Resources is a part of the Minnesota Extension Service. As such, our mission is to provide educational programs that bring lifelong learning to people throughout the state.

We seek to build and maintain a strong natural resource base in Minnesota. This involves management of natural resources, economic benefit from natural resources, and enjoyment of natural resources.

Our educational programs are based on unbiased, up-to-date research. They are planned in response to people's needs for solutions to natural resource problems and opportunities.





Natural Resources in Minnesota

▲ Minnesota and its natural resources are inseparable. The soil, water, forests, fish and wildlife are key ingredients in our economic prosperity and our quality of life.

As the base for our forestry and agricultural industries, the soil contributes to the annual \$3.8 billion in forest income and the \$7 billion in gross farm income. About one-third of our population works in jobs related to these industries.

Our lakes and streams are nationally known for their beauty and recreational value. We also use water to generate electricity, cool machinery, transport products, irrigate fields and gardens, and fill our bathtubs, clothes washers, and drinking glasses.

The forests are a renewable resource that add stability to the economy and provide long-term growth. Their contribution to our outdoor enjoyment is unquestioned.

Our challenge is to appreciate, develop, and manage these incredible resources.

Water, Soil, and Wildlife in Minnesota Today

▲ There are nearly 12,000 lakes and 93,000 miles of rivers and streams.

▲ Lakes, forests, fish and wildlife attract over \$2 billion tourist dollars each year in greater Minnesota.

▲ Half of all Minnesotans have fishing licenses (over 2 million). There is one boat for every 6 residents, the highest ratio in the nation.

▲ We use 85 gallons of water per person per day for laundry, dishes, bathing, toilets and lawns; only 2 gallons for drinking and cooking.

▲ Our indirect use of water is nearly 1500 gallons per person per day. It takes 120 gallons to bring an egg to your table, 60,000 gallons to produce a ton of steel for your car.

▲ Lake Superior is the largest fresh-water body in the world.

▲ The Boundary Waters Canoe Area is the largest wilderness area in the eastern U.S.

▲ Over 6 million visits are made to our state parks each year.

▲ There are 1 million acres of public hunting lands.

▲ Minnesota has 23 million acres of cropland and 600 soil types.

▲ 7 million acres of peat land, more than any state except Alaska, is an untapped economic resource.

Forestry and Forest Products in Minnesota Today

▲ Forests cover 1/3 of the state (14 million acres).

▲ \$3.8 billion annually in sales of forest products.

▲ 52,000 jobs and \$1.5 billion in wages annually; half of the jobs are in the metro area, especially producing windows, furniture, and kitchen cabinets.

▲ Over 800 sawmills in Minnesota.

▲ Minnesota is the nation's largest producer of waferboard, a plywood alternative; \$1 billion in investment has built six plants since 1980, two more plants are planned by 1995. Waferboard is made from aspen, our most widespread tree type.

▲ 9 pulp/paper mills consume 800,000 cords of wood per year.

▲ 2 million cords of wood are used to heat homes each year.

Future Issues in Natural Resources

The primary concern of the present and future is balancing short-term economic development with long-term management and environmental concerns. Some of the issues within each area are:

Economic Development

—Increased production of forest products

—New forest-related products

—New products and industries based on water resources

—Expanded regional, national, and international markets for natural resource products

Conservation and Environmental Concerns

—Continuing education for professional forest managers

—Continuing leadership to private owners in managing their forest and water resources

—Water quality

—Waste management and use

—Understanding and support of natural resource management by the general public



Goals

▲ Our major goals for Extension Natural Resources during the next ten years are:

1. Provide programs that build a productive, profitable natural resource base. These programs will help develop new products and industries, create jobs, and contribute to a stable economic base for rural and urban communities.

2. Promote management of our natural resources to address environmental concerns. This means having a sustainable harvest of natural resource products, while preserving our air, water, and soil quality for future generations.

3. Increase people's understanding and enjoyment of natural resources. We seek to promote responsible use of natural resources as a major contributor to "quality of life."

Strategies

▲ Our major strategies for achieving the goals are:

1. Anticipate critical problems in the natural resource area by monitoring trends and listening carefully to community leaders, business people, researchers, and consumers.

2. Use all available University research and faculty to respond quickly to the critical problems. Encourage county-based faculty to specialize, in order to provide depth in programming. Promote research in areas where it is needed.

3. Use information technology such as videotapes, computer software, and teleconferences to make programs available to a wider audience of people.

4. Multiply the efforts of Extension staff by selecting and training volunteers.

5. Strengthen relationships with natural resource agencies and industries: share information, sponsor joint programs, and eliminate duplication.

Program Priorities

▲ The programs which have high priority for Extension Natural Resources speak directly to Minnesota communities, individuals, and industries as they deal with natural resource needs and opportunities. All programs fit within the four central issues described earlier.

I. Economic Development

▲ **Economic and industrial development of forest products**
Act as a catalyst in developing new products, industries, and markets; assist in applying technology and research-based information.

▲ **Aquaculture**
Explore options for cash crops of fish from farm ponds; stimulate market development.

▲ **Land use alternatives**
Develop an integrated land management approach which combines economic return with progressive conservation.

▲ **Tourism**
Educate the tourism and recreation industry on ways to introduce Minnesota's natural resources to regional and national audiences.

II. Environment and Natural Resources

▲ **Water quality**
Preserve water quality through proactive, preventive measures; continue to address issues of acid rain and contamination of ground water by fertilizers.

▲ **Forest resource assessment, use, protection, monitoring**
Promote sound and productive forest management; plan for the expansion and enhancement of Minnesota's "third forest."

▲ **Resource management by private landowners**
Provide continuing leadership and individualized help to landowners in assessing and managing their forest, water, and wildlife resources.

▲ **Fisheries and wildlife management**
Continue to preserve and expand habitats; balance economic development with conservation concerns; promote responsible public enjoyment.

▲ **Soil conservation**
Contribute to educational programs that promote sound watershed management and prevent soil erosion on farmland and shorelines.

▲ **Waste management**
Improve waste management; develop productive uses for waste.

▲ **Outdoor recreational opportunities**
Maintain, improve, and expand recreational opportunities.

III. Human Development

▲ **Cold climate housing**
Educate builders and homeowners on building methods which eliminate moisture problems and indoor air pollution in super-insulated homes.

▲ **Youth education**
Provide programs in fishing and shooting sports, forestry projects, and conservation.

▲ **Public understanding of natural resources and their value**
Promote awareness and provide education to the public; use new technologies to deliver programs to more people.

IV. Community Leadership

▲ **Developing volunteer leadership**
Multiply the efforts of Extension by training and supporting volunteers.

▲ **Natural resource policy development**
Provide unbiased information and analysis to assist in policy development; promote policies which support responsible use of resources.



Benefits

▲ How do Extension Natural Resources programs benefit you?

For You as a Minnesotan

▲ The quality of lakes, rivers, forests, and parkland will be improved for you and your children to enjoy.

▲ You can get up-to-date, unbiased information on a wide range of topics: moisture damage in houses, squirrels nesting in your attic, treatment for diseased trees, and many more.

▲ You may hold one of thousands of jobs in natural resource industries.

▲ Your community leaders get reliable, research-based information to improve water quality and waste management.

For You as a Private Landowner

▲ You can receive help in assessing the forest, water, and wildlife resources on your land.

▲ You can get information on managing your resources, customized to your particular situation.

▲ You can market your resources more profitably because of the improved processing techniques and new markets that grow out of Extension research.

For You in Natural Resource Industries

▲ You can use our research-based information to improve the productivity and profitability of your business.

▲ You can join with us to sponsor educational programs and research efforts.

The Future

▲ The future issues concerning Minnesota's natural resources are clear: increased economic benefit, long-term management, and public awareness and education. Technology will give us access to a wealth of information. Our challenge is to help people interpret that information and make wise choices.

In the future, Extension Natural Resources staff will:

—Stay up to date on new technology for delivering programs.

—Meet new issues with appropriate research and specialization.

—Use the entire resource of the University.

—Maintain and strengthen partnerships with other natural resource agencies and industries.

Natural Resources in the Next Decade

Time: 1999

Place: Northern Minnesota

Extension's application of research helps create new products and industries based on natural resources.

Most schools and businesses now save on heating costs by using fiber fuel. Wood is one source, but two new items are also economical choices: peat from Minnesota bogs and agricultural leftovers such as cornstalks. Previously unused natural resources begin to make a significant economic contribution.

Extension also interprets the research to find a new use for the ash which remains after burning wood for fuel: it makes an excellent fertilizer. What was once a waste product now provides jobs and income to the state.

Information from Extension data banks is critical in developing new markets for these and other products, both nationally and internationally.

Extension Natural Resources makes a difference in Minnesota's economy.

Time: 1999

Place: Any Minnesota home

In the age of technology, people are overwhelmed with information. But, how do you **use** it? Is it accurate?

Extension Natural Resources provides reliable information; it is not controlled by vested interests or profit motives. Beyond that, you get help in **applying** the information.

Something wrong with your trees? Moisture problems in your house? A trained volunteer makes a home visit to identify the problem, uses a portable computer to look up solutions, and helps you pick the treatment that is best for you.

You or your children are interested in fishing or hunting? Your TV is hooked up to Extension classes via satellite; you watch the experts and ask them all your questions.

Your community is struggling with waste management or water quality problems? Extension specialists analyze information in light of the special needs of your community. You and your neighbors are able to make an informed decision.

Extension provides reliable information **and** help in analyzing and applying it to your needs.

Time: 1999

Place: A Minnesota Farm

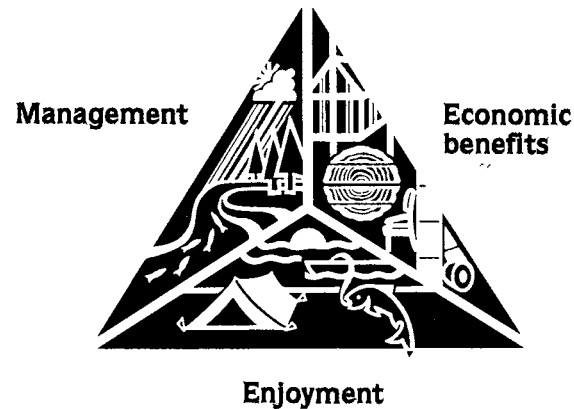
A pond on the Anderson farm used to serve only as a watering hole for cows. Now it produces a profitable crop of trout, sold to both midwest and northeastern markets.

Extension helps develop successful techniques for "farming" trout. The trout have been genetically improved to withstand Minnesota's climate. The Andersons use Extension software programs to handle record keeping and assist in management decisions. Consumer interest in trout is increased through Extension information on preparation and nutritional value.

Extension specialists help the Andersons explore other uses for their land, including growing Christmas trees and allowing people to hunt by paying a fee.

Extension expertise on natural resource products and management opens up new choices for Minnesota land owners.

Minnesota Extension Service Natural Resources



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Dean and Director
Minnesota Extension Service

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