

# FORESTRY'S

## NEW FRONTIER

Until recently, when a forester looked at trees he could envision only timber, paper, building materials, forage for domestic and wild animals and, perhaps, Christmas trees.

Now foresters are seeing new uses for the forests.

Reflecting this new vision, the School of Forestry at the University of Missouri-Columbia is making a radical change to a more flexible curriculum.

"For the past 20 years, forestry education has gradually shifted to greater emphasis on the service—as opposed to goods-potential of the forests," Director Donald Duncan says.

Instead of seeing what man can do with the trees, the forester now sees what trees can do for man.

These are the amenities, Duncan says. "The forest can provide an attractive recreational environment that is a suitable habitat for wildlife, can afford protection against winds, and can even act as insulation between interstate highways and residential areas. The decibel level of noise can be reduced by 50 per cent when noise is filtered through five rows of trees."

Farther off into the future are other environmental services the forests can perform.

Forests can help with the disposal of secondary effluents from the sewage systems of moderate-sized cities. "These effluents can be sprayed over the forests, and the nutrients will be removed by organisms in the soil and vegetation without contaminating the ground water. This is cheaper than a secondary treatment, and properly applied, the method could also increase forest growth."

"People do want all of these things from their forest," Duncan explains, "and what we in the School of Forestry want to do is meet today's—not

yesterday's—needs.

The business of the School is to tune out professional foresters of vision to provide these benefits to the greatest extent possible.

"Basically, this curriculum change we're working on will provide greater flexibility so that the student primarily interested in environmental forestry—planning and services—can get what he needs just as much as the student whose primary concern is timber production."

The curriculum in the School as it now stands is oriented toward the traditional goods production. The change will not involve the addition of many courses, however. "In fact," Duncan explains, "we're making some courses optional so the student interested in something other than timber production can take those outside courses he needs to specialize in the environmental area—sociology, community planning, and recreational and park administration, for instance."

Duncan stresses that the School is not abdicating its traditional role of training foresters to produce timber, paper and wood products. He says goods production is as important as ever. "Unless we drastically change our way of life in this country, we aren't going to cut our consumption of wood products back. Each American uses up one ton of wood products every year."

In addition to turning out professional foresters of the new or old breed, the School carries on professional educational programs, does research on problems as immediate as Dutch Elm disease and as future-oriented as land-use planning and the effect forests have on carbon dioxide consumption and oxygen production. The School also works with the small woodland

owners and big industrialists in Missouri. Duncan would like to see an increase in the number of people working in land owner education. Missouri has a large number of small woodland owners who are not able to afford a professional forester's salary. The amount of poorly-managed land is significant. There are two philosophical extremes in woodland use theory, Duncan explains. The strict preservationists say "hands off, let nature take its course," but this can actually damage the very forests the preservationist wishes to maintain. Certain types of forests require controlled burning, for example, to permit regeneration. At the other extreme are those who say the only measure of success is in making the maximum amount of money off every acre.

The environmentalist and good forester steers somewhere between the extremes, Duncan says. He attempts to "maintain a good environment and handle the land so that it produces the goods and services people want and is not allowed to deteriorate."

Duncan, however, does not believe that professional foresters should advocate goals for land-use—say a decision to make a piece of property a state park or to cut a forest down—that is a value judgment," he says. "We should let the people set the goals, and we, as foresters, should provide the facts about how various goals can best be accomplished—tell people how, not whether."

"The School of Forestry is concerned with turning out foresters with the expertise to best meet the goals of land-use set by the people," Duncan says.

The people's goals and needs for something beyond just logs from their forests are determining the direction of the School of Forestry. □