Immediate Release

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DULUTH--Contrary to some popular belief, there still are stands of virgin hardwood timber in Northeastern Minnesota, untouched by man or fire, according to Dr. Edward Flaccus, assistant professor of biology at UMD.

Dr. Flaccus presented a paper in Philadelphia today(Wednesday) on a research project he directed on such hardwood forests at the Ecological Society of America meeting.

The paper was co-authored by Lewis F. Ohmann, Virginia(Minn.), a 1961 UMD graduate now working on his doctorate in plant ecology at Rutgers University. Two former UMD students also worked on the research project under a grant by the National Science Foundation: Thomas Mowbray, Duluth, who now is working for his doctorate in plant ecology at Duke University; and Duane Annis, Saginaw, now studying forestry at the University's St. Paul campus.

Nine of 10 virgin hardwood stands surveyed are located three miles from the North Shore of Lake Superior, ranging from Duluth to Tofte, Dr. Flaccus said. The stands were sampled to determine species composition and soil samples were taken and analyzed at UMD for texture and at the St. Paul campus for chemical nutrients.

Sugar maple and yellow birch are predominent in these virgin or near virgin stands, Flaccus stated, with lesser amounts of white spruce, fir and white cedar. "At the very tops of hills and ridges, all species except sugar maple tend to drop out, leaving practically pure stands of hard maple.

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"Southward, from about the region of Bud Hill north of Two Harbors, basswood is added to the maple and birch as an important canopy species, and ironwood as a subordinate species."

Flaccus said that in time yellow birch, which does not reproduce well in heavy shade, will be replaced by sugar maple and by basswood, which has a high ability to sprout from stumps. He noted that Minnesota stands are lacking in hemlock and beech which are found in Wisconsin and farther east.

Dr. Flaccus said two essentially virgin stands are located near Duluth: in Jay Cooke Park on the west side of the St. Louis river, and in Magney Park at the southern end of the Skyline Drive. Before these trees leaf out in the spring, Flaccus said the woods abound in rosy bells, merry bells, Clintonia, wild sarsparilla, bedstraw and various species of violets and trillims.

The study showed that northern hardwood forests, consisting of sugar maple, yellow birch, beech, hemlock, basswood, white pine, spruce and fir, are found in a vast area stretching from Minnesota to New England. In Minnesota, the greatest concentration is along the North Shore from Duluth to Port Arthur, Canada. The stands reach as far west as Itasca Park and south to beyond the Twin Cities.

Dr. Flaccus said these northern hardwood forests are very stable and reproduce themselves with little change. "But the quality of the Minnesota stands is poor, the sugar maple particularly being valueless due to frost cracking and resultant heartrot."

He noted, however, that the maples are still being used by the Indians in making maple sugar on the Grand Portage, Red Lake and White Earth reservations, on Mt.McKay at Fort William, and from a stand just northeast of Aurora.

Dr. Flaccus said further study is needed to answer questions as to why the northern hardwood forests are not found closer to Lake Superior than three miles; what factors are responsible for their virtual absence between the North Shore belt and the Iron Range; whether the forests are spreading at the expense of aspen-birth now that efficient fire control has virtually eliminated large scale forest fires; and how such stands should be managed for maximum economic returns.

The Ecological Society of America sessions were held in conjunction with the annual meeting of the American Association for the Advancement of Science.