

Every one of these needs is important. Each has its value, some direct and tangible and some intangible but just as real. To meet them, we must keep pace with the diverting of forest lands to purposes such as urban development, wilderness areas and reservoir construction, urging all landowners to put their idle acres to work in Tree Farms and to manage more efficiently the forest already in existence.

The greatest hope for success lies in proper forest management, based on true conservation which provides for the full utilization of all our natural resources.

WILDLIFE AS A MULTIPLE LAND USE IN FARMING OPERATIONS

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Members of this panel represent lands of the Federal and State forests, other public lands, and the large areas owned by the pulp and paper industry. These all have a valuable potential for outdoor recreation as an associated land use. But greatly exceeding these in vastness and interspersed, are the farm lands in private ownership. These are the lands that have provided most of the hunting for the public in the past. They are the lands which now have—and will continue to have in the future—the potential of supplying a large share of the hunting and fishing for the public as a multiple land use in farming operations, or as a primary land use. But, according to the present trend, the degree to which this potential will be realized will be the acceptance of outdoor recreation as an *income-producing land use* for the individual farmer. It is unreal thinking to assume he will personally undertake the cost, effort, and inconvenience to provide an outdoor recreational facility for free use by the public.

Reduced to utmost simplicity, any farmland in the Southeast—even if misused—might be considered as “wildlife land” and thus having a multiple use for outdoor recreation. Depending upon the acreage and vegetation, there might be an occasional covey of bobwhite, a squirrel, a rabbit, or some other species which might be of a sportsman’s interest. However, it is rare that such populations would merit consideration in meeting even present demands for hunting. If acceptable wildlife populations are to be produced as a multiple land use, planning and application of definite practices are required.

During the past 25 years, the Soil Conservation Service has developed a surprising number of techniques and practices designed to produce crops of fish and wildlife in conjunction with normal economical and good conservation farming activities. In addition, the SCS has developed other techniques for management of lands primarily for wildlife.

The results of recently completed SCS field trials in peach orchards is a good example of multiple land use practices to benefit wildlife. It is a standard practice to plant an annual cover crop on the sloping Piedmont lands in peach orchards to protect them from erosion. Why not use a cover crop that also produces a choice dove food? We tried it. From the experience so far, brown-top millet is a satisfactory cover crop from the peach growers’ standpoint. At the same time, the millet seed feeds large numbers of doves during the fall and winter. Some of the seeds have hard seed-coats which resist deterioration and these furnish dove food the year ’round. The peach trees contribute to sporting dove shooting during the open season.

A long-standing example of multiple land use in crop fields to favor bobwhites has been the use of food plantings along field borders. The edges of a field adjacent to woods does not profitably produce crops because of the shading and sapping effect of the trees. However, choice quail foods as bicolor lespedeza and tickclovers are tolerant to these edge conditions. A strip 15 feet wide and 400 feet long can easily furnish enough food for a covey of bobwhites.

Although grazing has often been considered as detrimental to the welfare of most kinds of wildlife, actually certain types of grazing can be used to benefit

wildlife food plants. Many wetland areas make good summer range for cattle if water control can be established sufficiently for a cow to stand on the boggy ground. The cattle graze most of the native marsh plants except one—the smartweeds. The smartweeds are choice duck foods and the grazing of competitive plants by the cattle favors good seed production by the smartweeds. The grazing also removes much of the heavy marsh vegetation and thereby makes better feeding conditions for ducks. These range pastures “play out” in the fall and the cattle are moved to other pastures. The field can then be shallowly flooded by the same water control structures used to make it suitable for grazing and provide the dual use as a duck field until spring.

In some sections of the Southeast, grazing favors wooly croton—a choice food of doves and bobwhites. In fact, where there are natural stands of croton, the heavier the grazing the better the growth of croton. This is because the livestock will not eat the croton, they graze out competitive plants, and they trample croton seed into the soil and thus increase the stand.

Recent studies by Verne Davison have shown that fields planted in rye as an annual grazing crop also favors stands of wooly croton, which is subsequently used by doves and bobwhites. Here again, the livestock will not eat the croton and the fall soil disturbance for planting rye not only reseeds the croton, but also leaves much of the seed on the bareground condition most attractive to doves.

In deer and wild turkey country, well-managed livestock pastures of fescuegrass, rescuegrass, and clovers also furnish choice winter foods for both deer and turkeys. Indeed, if such pastures are well distributed over the farm, any other food plantings for deer and turkeys are unnecessary.

Bahia grass is well suited for summer pastures on light-textured soils. Wild turkeys readily strip the seed heads of bahia during the fall months. Associated crickets and grasshoppers furnish choice summer turkey food.

Some kinds of wildlife populations might be said to be the direct result of farming operations. This is best exemplified by ring-necked pheasants, as this species is largely dependent upon the corn-grain type of farming which predominates in its range.

Multiple use of other farming practices by wildlife are obvious. In almost every case, a pond built to serve as a source of water for irrigation can be properly stocked and managed for fish, with no conflict to its primary purpose. Quite the opposite—the fertilization required for good fish production prevents the submersed pondweeds which cause trouble in irrigation systems.

Since water for the irrigation of crops is not normally required during the winter, the water may be used to flood a field which has been diked and planted in choice duck foods. Or a bottom-land area of hardwoods may be flooded during the winter months to form a woodland duck pond, without harm to the trees.

A not-so-obvious multiple use involves a hog pasture on nearly level, low-lying land. If such a pasture is surrounded by a low dike, and the field puddled during the winter months with water from a well or pond, it can make an excellent snipe field. The rooting of the hogs during the summer favors the worm-like snipe foods, and at the same time leaves a rough surface terrain of puddles and rills which make desirable feeding conditions for snipe.

The use of multiflora rose as a living fence has become an accepted farming practice. Research at Patuxent Refuge has shown that a multiflora rose fence can result in trebling the cottontail population on a farm. For those not interested in hunting, a multiflora rose fence is a favored habitat for many non-game birds.

Multiple use can even take advantage of undesirable conditions on a farm. Beaver colonies become established on many farms in the Southeast. In most instances, the farmer does not want them but they are extremely difficult to eradicate. SCS Biologist Arner developed a simple three-log drain which can be inserted in a beaver dam. For some reason, this type of drain baffles the beavers long enough to where Japanese millet seed broadcast on the wet soil of the drained pond can mature a crop. When the beavers manage to seal the drain, a fine supply of choice duck food is flooded and made available under good duck feeding conditions.

This discussion could be continued to include some wildlife benefits as a multiple use of conservation practices such as strip cropping, windbreaks, perennial hay, and many others. In general, any practice which reduces erosion favors some species of fish or wildlife, but often these benefits are marginal.

Although wise planning can result in greatly increased wildlife populations associated with various land uses, this will not be the complete answer for future demands in this phase of outdoor recreation. Maximum wildlife production can only be attained when such is a specific land use for a specific kind of wildlife. Farmers in the Southeast are capable of meeting public needs in hunting and fishing when this becomes a profitable income-producing land use.

MULTIPLE USE ON FOREST INDUSTRY LANDS

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Even today, industry is often depicted as the "spoiler" in the conservation of natural resources. Resource management historians like to cite the exploitation of timberlands by the lumber industry in New England, then the Lake States, then the South, and finally the Northwest. It's true that in our nation's early years great quantities of timber were available for the taking, and competitive prices dictated the "clear cut and move" policy. To some extent, our vast timberlands were obstacles to transportation and agriculture. It was no easy task to clear a piece of land of timber and develop the soil into agricultural production; hence, there was little objection to this type of forestry practice.

Exploitation of our wildlife resource was also part of the price we paid to buy "progress." Game was sold on the open market. Buffalo hides and beaver pelts were used as common exchange by pioneers. Drainage of potholes reduced our waterfowl populations; fencing the range and plowing the prairies relegated the buffalo and prairie chicken to remnant species. The growth of our national population demanded greater use of each individual acre of land, and any change in habitat has a resultant effect on wildlife populations.

Too often the public assumes that the only solution to a resource problem is government ownership or supervision. But industry has also met the challenge of conservation of our forest and wildlife resources.

As virgin timber disappeared, it became necessary for the timber industry to become stabilized in a given community. In some cases this meant the development of a forestry program that would provide a sustained yield of forest production for the mills; in other instances it meant organizing private landowners into groups which agreed to follow good timber management practices. Such programs gave a sense of permanence to the industry and to the local economy.

The management of timber production on industry-owned lands was not complicated. Professional foresters were hired and the best modern forestry practices were employed. However, industry found it economically impossible and undesirable from a public relations standpoint to buy all of the timberlands needed and manage them properly. Private landowners were indifferent to timber management and little was being done to encourage private timberland owners to practice good forestry. Their small tracts of land amounted to millions of acres in the aggregate, and on an individual basis it was impossible to employ professional assistance.

But since 1941, the American Forest Products Industries, Inc.—an organization of private industries utilizing forest products—has sponsored and coordinated the national Tree Farm Program. A Tree Farm is a private forest being managed under modern forest practices, and a Tree Farmer agrees: (1) to hold his land for permanent forest production; (2) to provide adequate protection against fire, insects, disease and damage by destructive grazing; (3) to harvest his timber crops properly; and (4) to allow professional foresters to inspect his property and help him raise a better tree crop in his own interest.

The primary purpose of Tree Farms is to grow continuing supplies of raw materials for wood utilization plants; but like all forest land under management,