

News from the Watershed

Prescribed burning in an agricultural setting

Last week I wrote about prescription burns and how they benefit the forests and natural plant communities. But did you know that prescribed burning is also a useful tool in the agricultural industry? It is one of the most valuable tools for land managers in Florida. A number of benefits are obtained from prescribed fire including the control of undesirable vegetation, preparation of sites for harvesting, planting or seeding, control of plant disease and pest control, reduction of wildfire hazards, wildlife habitat improvement, enhancement of seed and seedling production, improving growing conditions for desired species and improvement of forage and grazing for livestock.

Many undesirable species of plants are not tolerant of fire; therefore, prescribed burning is an effective method in eliminating these pests. Lack of periodic fire may contribute to the invasion of exotic or undesirable species. In many cases, fire must be implemented to the site to achieve long-term control of the problem species.

In the case of site preparation for seeding or planting, burning consumes much of the debris that is on the ground. The result is more tightly packed beds and better seeding survival. Prescribed fire also recycles nutrients, making them available for the next crop. Low intensity burns increase availability, palatability, quality and quantity of grasses and forbs. Regular burning of rangelands and under story plants improves forage quality and quantity for wildlife and livestock. The new plants are full of nutrients and are often more nutritious and tasty to animals.

Landowners may experience challenges with the control of plant disease and pests. Prescribed burning is one of the most practical methods of disease and pest control. Herbicides and pesticides may be effective in many instances; however, prescribed burning is generally not as costly, saving the landowner both time and money. In addition, as stated above, prescribed burning replenishes the soil with nutrients and actually stimulates new growth for a healthier crop.

By using prescribed fire, fuel reduction is achieved. When areas are not burned for long periods of time, debris will build up on the ground. Plants may die, trees may fall from storms, dead leaves may accumulate and all of these give rise to the possibility of a wildfire in dry conditions. Fire, when carefully planned and used as a tool, will reduce the amount of fuel buildup on the ground. When the fuels are not available, the possibility of a wildfire is substantially reduced.

Wildlife habitat is greatly improved by prescription burns. Fruit and seed production is stimulated. The amount and quality of vegetation increases. Openings are created for feeding and travel. Dove, deer, quail and turkey benefit from prescribed fire as do many listed wildlife species, including the Florida panther, gopher tortoise, indigo snake and red cockaded woodpecker. Fire can stimulate production of desirable plant growth, improve food availability and restore ecosystem balance.

Burning also enhances seed and seedling production. Since the soil is full of nutrients from the burn, the quality of the soil is improved, giving rise to healthy crops. Dead material low in nutrient value is removed while new growth high in protein, phosphorus and calcium becomes readily available. These benefits may be manifested in increased seasonal livestock weight gains.

All of these benefits allow for the production of the desired plant species and improve the forage and grazing for livestock. It is obvious by now, that carefully planned, prescribed fire is a useful tool for the landowner.

Some state and federal programs, such as the Environmental Quality Incentive Program of the US Department of Agriculture, Natural Resource Conservation Service (NRCS), encourage the use of prescribed burning and the Federal government recognizes its use as an important element of land management.

Of course, like any tool, prescribed fire must be used properly. Planning is critical. Proper planning to ensure control includes considering every variable, including fuel amounts and types, weather conditions, surrounding areas and education and skill of those performing the burn.

Prescribed burns are critical in today's world in an effort to maintain native ecosystems as well as managed land. The reasons are clear. The NRCS has cost share programs available to the land owner that include prescribed burning. To find out more, visit our office on George Blvd. in Sebring, visit our website at <http://www.highlandsswcd.org/> or contact us at 402-6545.