

News from the Watershed

There is life after the burn.

Unlike a structure, which may be completely destroyed by the raging flames of a fire, some forests actually benefit from burning. In July I wrote about prescribed burning and the many benefits it provides to our forests and agricultural lands. Since writing those articles, I have had the opportunity to view the area that was burned two months later and I wanted to share the experience with you.

Immediately after a burn the land appears somewhat ghostly. The ground is covered in ashen white and black. The tree trunks are marked with charred black. Spirals of smoke lift toward the sky from the blackened, sticklike vegetation. A few remaining flames continue to lick at the dead stumps and cat faces (deep scars on the bark) on the pines. The smell of smoke and extinguished fire is strong and the place has a wraithlike feeling to it. The fire has come and gone and done its job. The flames have now vanished and left only these blackened areas behind. Or have they?

What we can't see is the life that still exists under the blackened earth. Fire actually encourages regeneration for many plants by removing existing plant parts above ground that inhibit the growth of the portions located under the soil. Since these portions of the plant are located under ground, they are insulated from the flames and high temperatures. Other plants have dormant buds located along the roots from which new shoots can originate. In addition, vegetation with rhizomes (horizontal underground stems) will begin to produce new shoots and roots. Dormant buds may be located underground and produce many new sprouts after the burn.

In fire dependent plant communities, (such as pine flatwoods) many plant species store seeds in insulated cones that will open and release only after the extreme heat of a fire. Other species store their seeds in the soil and require fire to stimulate germination. Some seeds have very hard seed coats and the heat of the fire will aid them in the germination process. In many cases, the only time that new seedlings can establish themselves is after a burn. The reason is simply because they require sunlight to grow and since the flames have removed the vegetation above ground, sunbeams are now plentiful in that area.

Two months after the fire, new plant growth is plentiful, reaching toward the now available sunlight. Solar heat absorbed by the blackened surface warms soil quickly. Plants are now stimulated by the healthy soil as well as sunlight and vigorously sprout new, green, moisture filled shoots. Saw palmettos, gallberry and fetterbush are lush with new growth, which is more productive and palatable for herbivores than prior to the burn. The animals that seek food in these areas gain more weight and have fewer problems with ticks, mites and flies.

The birds that retreated during the burn have now returned and are foraging on the abundance of food available in the open spaces. The amphibians and reptiles that avoided the flames by moving away or burrowing underground now feel free to come out and discover the new landscape. Butterflies take pleasure in the wildflowers that are now plentiful. Mammals, both large and small, can now easily navigate the area since most of the large vegetation has been temporarily removed by the flames.

The plants and animals that did not survive the fire provide food and shelter for those that did. Scavengers have fed on the creatures that were killed in the fire and insects benefit from the fallen trees. Birds use the standing trees that have not survived for perches and homes to raise their young.

The wet areas of the burn are now more open allowing the stimulation of vegetation, which will encourage many aquatic and semi-aquatic species.

All of this is occurring only two months after the burn took place. The swiftness of the new plant growth is remarkable. The fact that the area is abundant with life is a testimony to the value of these fires. After a burn there is nothing to fix, the land will simply follow its own course towards a new and exciting balance.

For more information on prescribed burning and conservation of our precious natural resources, visit our website at <http://www.highlandsswcd.org/> or give us a call at (863) 402-6545.