

Oil and Gas Exploration in West Virginia: A Primer for Wildlife Considerations

(Article contributed by Sheldon Owen, WVU Wildlife Extension Specialist)

Oil and gas exploration will bring about many changes to the landscape in West Virginia. The construction of well pads and pipeline right-of-ways can have effects that are both beneficial and detrimental to forest lands and the species they harbor.

In the wildlife world there will be both winners and losers. The construction of well pads and pipeline right-of-ways will produce early successional habitats. Early successional habitats are those that naturally occur following a significant disturbance or forest canopy removal and are characterized by grasses, shrubs and saplings. Some wildlife species prefer this type of habitat and will therefore do well in lands following oil and gas exploration. Wildlife species that are habitat generalists, such as white-tailed deer, raccoons, and wild turkey will also fare fine following exploration for these species can survive in a variety of habitats because they can make do with what is available. The wildlife losers will be forest interior species or habitat specialists (those that require very specific types of habitat) such as the Cerulean Warbler or Scarlet Tanager that do not tolerate disturbance and the early successional habitats disturbance creates. Species that require large expanses of similar habitat, such as contiguous forests, are especially at risk due to habitat fragmentation brought on by the construction of well pads, roads, and right-of-ways. In addition, roads and right-of-ways may create barriers to dispersal for smaller wildlife species such as amphibians and reptiles. These barriers could, for instance, cut off migration paths or separate individuals from a necessary food or water source. Additionally, these smaller species sometimes rely on smaller environments, such as vernal pools, that can be completely lost due to disturbance. Therefore, while oil and gas exploration will not cause the loss of all wildlife, it will likely cause shifts in species assemblages (wildlife species found on your property) depending on the level of disturbance your property experiences.

So what can a landowner do? First of all, educate yourself. Know what you have on your property. Identify any critical habitats or rare wildlife that may be affected by oil and gas exploration. There are many resources available to help you in determining



Wildlife food plot planted with corn, sorghum, & clover.

what habitats and wildlife your property supports. Contact your local natural resource professional for assistance. For example the WV Division of Natural Resources, WV Division of Forestry, USDA Natural Resource Conservation Service, or your local Extension Office could all provide guidance. These agencies have wildlife biologists and forestry professionals available to help you determine what resources your property supports, and also help you develop a plan to restore your property after the disturbance.

Second, work with the oil and gas companies to ensure every step is taken to minimize disturbance and its negative consequences. Negotiate your lease agreement to identify procedures that minimize habitat and wildlife impacts during the disturbance and implement practices that benefit wildlife during the restoration and re-vegetation processes. In addition, work with adjacent landowners to form coalitions which can help in negotiation with the oil and gas companies as well as help address wildlife and habitat issues on a larger landscape scale. So remember that oil and gas exploration does not have to be incompatible with wildlife and habitat management. It will, however, require first that you do some preliminary exploration of your own to know which species and habitats you have, then that you develop a plan to address how you want to reclaim the site to best benefit the wildlife and habitats of interest.

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