

Impacts to Plants, Animals and Habitat *Information Needs*

Exploration

- Does seismic testing and development (drilling, fracturing rock, blasting) affect hibernating bats?

General Oil and Gas Development

- To what extent do oil and gas exploration, drilling, and site maintenance contribute to the spread of non-native invasive plant species?
- To what extent do access roads, well sites, and pipelines serve as fragmenting features in otherwise forested landscapes?
- What species are affected by noise generated by oil and gas activities (at low vs. high well densities)?
- What are native planting recommendations for revegetation of disturbed areas at well sites that will reduce invasion of non-native invasive plant species and limit off-site soil movement?
- What types of vegetation management at and around well sites benefit wildlife species, at the local and landscape scale? Specific interests include pollinators, American woodcock, bats, forest interior birds?
- How does drilling and fracing affect groundwater?
- What mitigation measures are most effective in maintaining the integrity and productivity of springs and seeps?

Roads

- At what density of roads are raptors adversely affected (e.g., Northern goshawk)?
- How does road density affect less mobile sensitive species, such as amphibians and reptiles?
- Do buffers between roads and nesting/denning sites limit disturbance to sensitive species (e.g., Allegheny NF Forest Plan standards and guidelines)?
- What level of aquatic habitat impacts occur at varying levels of road density? Specific interests include sedimentation issues such as embeddedness and pool filling?
- What combination of road design, placement and surfacing can reduce adverse impacts to aquatic habitat?

Surface Pits

- What wildlife species are attracted to surface pits to feed or drink, and to what degree are individuals adversely affected?
- What are successful wildlife exclusion techniques that can be used at pits?