

Natural Succession

Plan for White's Woods 2022

So, what is Natural Succession? This is a biological process that describes how ecological [or biological] communities replace each other according to the timing and the habitat where this change occurs.

If a fire, flood, logging, or any natural disaster occurs that eliminates the vegetation, including trees, in a place, leaving the area bare, nature, who abhors a vacuum, continues.

In White's Woods, Indiana, PA, logging occurred in the 1930's. Since that time, slowly but surely, the forest began to return.

1. The first species that fills in the barren area are the lichens, moss, grasses, and weeds. These plants attract insects, birds, and small animals, who in turn deposit seeds for the next stage of forest development.



Map images of old growth forest decline from 1620 until 1990.

[Reddit.com](#)

2. The next stage of succession is herbaceous plants and shrubs. Herbaceous plants are perennials like dandelion, chicory, joe pye weed, burdock, and yellow dock as examples of herbaceous

plants. The wild shrubs arriving at the time when White's Woods was redeveloping were wild berry plants, rhododendron, azalea, and mountain laurel, to name a few.

- a. These would have been the wild plants in PA during the time when White's Woods was logged. Today, this would be different.
- b. Today, 2022, a logged, burnt, or flooded deforested place would experience a different group of perennials to arrive. Today, in agricultural zone 5, where we are in Indiana, PA, we would see Japanese knot weed, garlic mustard, and stilt grass as the entry level species in a deforested place.

Each type of vegetation that inhabits a place naturally attracts different species of animals, birds, and insects. Each of these contributes to the variety of vegetation that arrives, dependent upon what the animal life eats and deposits via scat. Wind also scatters seeds.

3. So, after the perennials and shrubs, the next vegetative group to arrive are the small trees, such as poplar and small pines. While the forest is in this stage of development, oaks, beech, and cherry generally do not arrive until the poplar and small pines grow large enough to host the species of mammals that will plant the seeds for these next types of trees – oaks, beech, and cherry.
4. The arrival of the oaks, beech and cherry trees indicate that the matured or climax forest is on its way.
5. When the sugar maple, hickory, and beech arrive naturally, then the forest is said to be in its climax stage, meaning that it is finally becoming mature. These types of forests are not common in PA. Cook's Forest is an example of a climax forest.

Each of the above-mentioned stages of the development of a forest takes decades and it may be over 100 years before the climax stage can even begin.

This explanation of Natural Succession is how White's Woods is evolving today. Walking through the natural preserve of White's Woods Nature Center, one sees that various species of birds, plants, underbrush, animals, and trees are growing on their own, without human intervention. So far, this is successful.

The invasive species that have crept into this woodland will explode when any tree cover is removed. The invasive species that are in the woods today need sun to survive.

Deer, eventually, will not be a problem. They are a problem today because of the built environment that caused them to lose their habitat. Disease and predators will reduce their numbers.

See also:

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