Core Module #9: Parks, Open Space, and Habitat

Employment Module
The numerous types of plant and animal habitats on Earth.
The importance of parks and open spaces for plants, wildlife, and humans.
Challenges in preserving and protecting native species.

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Themes
1. The numerous types of plant and animal habitats on Earth.
2. The importance of parks and open spaces for plants, wildlife, and humans.
3. Challenges in preserving and protecting native species.

Background
Parks and open spaces provide us with public places to enjoy for recreation, relaxation, entertainment, and civic engagement, all while providing space for our wide array of plant and animal species to thrive. They provide critical green infrastructure, thus aiding in stormwater control, air pollution abatement, and cooling our communities in a changing climate. They are lands owned by the people and managed for the people. Whether you are an avid active sports enthusiast, hiker, birdwatcher, or someone who just wants to be in a beautiful space enjoying nature, our park systems provide that opportunity. And while we enjoy all these diverse and unique lands, we must also become good stewards to maximize the values derived for every person and every living thing everywhere.

Values
We know that having close access to parks and open space makes our quality of life better. Whether it is a large expanse of natural lands and forests or a linear trail along a waterfront, there is something for everyone.

Our parks:
- improve physical and mental health;
- increase property values;
- provide places for community to come together in nature; and
- provide places to grow healthy, nutritious produce.
**Habitats**

Parks and Open spaces provide habitat for birds, bees, butterflies, and other species reliant upon these natural spaces. Our flora and fauna rely on very specific habitat types. Our landscape is a mosaic of forests, fields, meadows, aquatic, and others. To maintain our diversity of species, we must also maintain the diversity of our habitats. Diversity is everything — in people, plants, and wildlife. For instance, there are many bird species that rely on large tracts of intact forests to breed and survive. These “interior species” need to be deep in the woods and cannot live in areas where there is "forest fragmentation." Forest fragmentation occurs when large tracts of forested lands are disturbed by the creation of roadways, utility line "rights of way," and other developments that create smaller blocks of intact forest and create opportunities for edge dwelling predators, like predatory birds and mammals like crows, blue jays, raccoons, and coyotes, that become extremely abundant as forests are fragmented. Sensitive interior forest birds need to be away from those dangerous forest edges, so there must be enough unbroken forest for them to persist. Fragmentation reduces the quality of habitat for this suite of species. Some examples of interior bird species are the barred owl, scarlet tanager, worm-eating warbler, and the wood thrush. The wood thrush is now listed as a “species of concern” and is being considered for listing as an “endangered species” in New Jersey due to steady population decline.

Some forests are suffering and need help to conduct ecological restoration activities. Many forests are in good condition, especially if their soils have never been disturbed by past agricultural uses. Forests on these undisturbed soils should be left alone to mature and sequester massive amounts of carbon for many decades while also holding on to their habitat values.

On the other hand, there are species that require open grasslands and meadows to survive. These "grassland species" need the sunlit fields that provide grasses, flowering plants, and insects for breeding, nesting, and feeding their young. Grasslands and meadows are insect "factories," as the insects breed and thrive in these spaces providing nutrition for birds, moles, voles, field mice, and other species. Many of these grassland species are "ground nesters," meaning they build their nests on the ground and in the grasses and meadow plants. Unfortunately, many of these habitats are active farm fields, and successful nesting is determined by the type of farming as well as the farmer’s understanding of the value of these unique habitats. We strive to strike a balance with thoughtful farmers to enable their harvest in ways that protect some of the nesting populations. Some examples of ground nesting grassland bird species are bobolink, eastern meadowlark, and Savannah sparrow.
Aquatic Habitats
As global scientists and astronomers search the universe for life, the first marker they seek is water. If they find water, there may be life. Clean water is a basic need in all living things. People, plants, and wildlife require water to exist. From microscopic organisms to the largest animals on earth, water provides both habitat and support in keeping things alive. From the smallest trickling headwater stream to the vast oceans, Earth’s life abounds. Water contains an intricate system of organisms feeding the food chain of life.

The lands abutting our waterways impact water quality. As rain moves across our landscape, it ultimately lands in our streams, rivers, and groundwater, affecting these aquatic systems. Things that humans use every day — fuel, fertilizers, pesticides, and salts — are washed into these systems, impacting the quality of our waterways for potable use by humans, plant life, and aquatic organisms. Protecting lands adjacent to our waterways provides buffers to mitigate and filter runoff into the system.

Parks and public open spaces are for the people and all forms of life that depend upon them, and we can help to care for these public spaces as we all enjoy them and benefit from their existence.

Challenges
We must make sure that everyone has access to these public amenities, wherever they live. Not everyone has access to quality parks and recreation opportunities, and they are not all equal quality. Our parks and open spaces often suffer from overuse and sometimes neglect. Parks and open space agencies across the nation routinely see budget reductions in challenging fiscal years, and these results are immediately seen in the lack of maintenance of the land and reduction of programs that attract people to these spaces.

Our habitats are frail and are constantly changing these days, largely related to climate change and the introduction of non-native species (plant and animal) replacing or displacing our native species. Collectively, we must act to curtail these disruptions to our natural systems.

Forest challenges
Many of our native forests are challenged by climate change, invasive plant establishment, fragmentation, overpopulation of deer, and development. Our forests must have sound management plans to ensure their long-term viability and health.
Grassland species challenges
Grassland species have diminished over the years, largely due to loss of habitat and increased pressure by new agricultural practices.

Aquatic habitat challenges
Our warming planet and increased runoff, like lawn and agricultural chemicals, are a real threat if unchecked. Care must be taken to understand that what is done to our land, ends up in our waterways and aquifers.

Solutions
We must as a community engage our local leaders and neighbors around the value of these open spaces. The best and safest parks are those that have high visitor use and enjoyment. Community engagement, advocacy, proper design, and stewardship will ensure the protection of these important public amenities now and for many future generations.

NJ is fortunate to have a platform known as the Conservation Blueprint. It is a one-stop information platform with loads of content about open space, habitats, and forests. See the link in the additional resources for this module.

Job Creation
Job opportunities related to open space include land acquisition professionals, appraisers, land surveyors, environmental consultants, landscape architects and designers, planners, arborists, construction specialists, land stewards, docents, recreation programmers, event planners, and more. Unfortunately, the BIPOC community make up a very small percentage of the workforce in most of these professions and fields.
Facilitation Questions:
1. Tell me about the parks in your community:
   a. Do you take advantage of them?
   b. Are they well maintained?
   c. Are there programs available that invite you to your local parks?
   d. What do you enjoy most about your local parks?
   e. What are some of the challenges you see?
   f. What would be your ideal park/open space experience?
2. Do you know what a Land Appraiser does and how they go about determining property values?
3. Do you know about Landscape Architecture?
4. Do you know what a Land Surveyor does?
5. Have you ever heard of a biological survey for plants, butterflies and moths, birds, or mammals?

Additional Resources:
- National Park and Recreation Association
- Land Trust Alliance
- NJ Park and Recreation Association
- American Society of Landscape Architects
- Appraisal Institute
- National Society of Professional Surveyors
- NJ Conserve Wildlife Foundation
- NJDEP Natural Lands Management
- NJ Conservation Blueprint