

Natural Resource Preservation Brief #5
Resource Base Inventory

What is a Resource Base Inventory (RBI) or an information base?

Basically, it is the analysis and synthesis of existing data in a format (generally maps) that can be used by planners and management to solve the major issues arising in planning. Varying from park to park, an RBI depends on the area's age, resources, and geographical location. Generally, however, the data can be broken down into three categories: Regional Socio-economic and transportation evaluation; synthesis and analysis of physical and biological data to determine resource capabilities; and bibliography (1).

You will note from this quote, emphasis is placed on resource use and development. An RBI is also very important in establishing the nature and condition of park resources.

So how does this apply to Antietam?

The Resources Management staff is responsible for developing and maintaining the park's information base. Data is currently stored in three formats.

1. Maps - The staff is actively acquiring maps which illustrate features such as topography, hydrology, roads, utilities, soils and so on. Where maps do not exist for specific subjects, the staff may produce those.
2. Aerial Photographs - We are attempting to locate or acquire aerial photographs of the park for as many different years as we can. These are invaluable in detecting developmental and vegetative changes.
3. Narrative Files - These files appear either as published documents or as information kept in file folders in the central park files. Examples include planning documents, scientific reports, annual reports, old permits, etc. This information should not be confused with field guides or reference books of a general nature.

Each of these formats may contain data which is specific to the park or which is specific to the region (usually the county).

The following statement from the NPS Policy Handbook provides further clarification on this subject:

The Service will develop, gather, compile, store, analyze, update, and employ adequate natural, historic, social, economic, and demographic data relevant to planning and management of each park. Such data will serve as an information base for the achievement of park objectives. This information is required for the preparation of general management plans, environmental impact statements, and specific plans; for review of projects under Section 106 of the National Historic Preservation Act and Executive Order 11593; and for development and various management actions. In the absence of adequate information for planning and management decisions, its acquisition becomes a prerequisite to action.

The Resources Management staff is involved in several special information management projects which should be brought to your attention:

1. Overlay Maps - A series of small scale overlay maps (1" = 400') is being prepared which can be used for a number of purposes. Each overlay displays one feature (soils, topography, roads, etc.) so any combination of features can be displayed. These maps will eventually be prepared at a much larger scale for use in planning documents.
2. Databases - We are in the process of developing a series of computer databases to be used in tracking and manipulating information. Thus far we have created systems which handle natural history observations and Eastern Bluebird Management. We plan to develop similar systems for pesticide use and land resource data.
3. Photographic Inventory - During the Spring of 1985, we hope to institute a photographic inventory program. This will consist of taking panoramic photographs at selected sites around the park. Each year we will return to those exact same sites and repeat the process. Fifty years from now detailed records will be available for comparative purposes.
4. Automated Information Base System (AIBS) - This is a regional program in which all mapped data about a park is digitized and placed in a computer. This allows a person to superimpose several parameters on top of one another and to produce maps at any scale displaying the combination of those parameters. The system also accommodates data which is remotely sensed.

It is important to remember that this information is gathered for your use. The possibilities for it's application are infinite.

If the Resources Management staff can assist you with your map or data needs, please do not hesitate to contact us.

The Natural Resources Management Staff