

PROJECT DESCRIPTION

Habitat data has been collected on nearly 250,000 acres of public lands in east Arkansas. The plot data needs to be processed for each of some 350 stands to determine habitat quality for IBWO. The resulting tables are imported into GIS for spatial analysis and use in prioritizing search areas and determining management actions for endangered species and other wildlife.

Processing has been cumbersome with statistical software running custom routines for each parameter. Commercial forestry software can process many parameters off-the-shelf. Flexibility in the commercial software allows modification so that IBWO and other wildlife parameters can also be processed and reported. As the forestry software (TwoDog®) is based in Microsoft Access® 97, a database specialist can prepare an application to process the IBWO and other wildlife parameters that will provide results of habitat inventories within days rather than months. The commonly used ArcMap® GIS program is designed to use Access as well. Thus, the database specialist should be able to integrate the database tables with GIS to analyze, spatially display and report on habitat quickly and efficiently.

The purpose of this project was to adapt commercial forestry software to streamline data analysis of forested habitat parameters from Desired Forest Conditions (DFCs) inventories.

OBJECTIVES AND ALTERNATIVES

To utilize scientific measurements to efficiently assess wildlife habitat conditions. The results are to be used in preparation of annual work plans and Habitat Management Plans.

METHODS AND PROTOCOLS

Utilize a software specialist to adapt commercial forestry software (TwoDog®) to accept and store forested habitat variables about DFC's.

DATA MANAGEMENT

Existing data is imported into TwoDog, which stores in MS Access® 97. New data is keypunched into same software.

DATA ANALYSIS / MODELS

Data analysis is conducted and reported by TwoDog. Further analysis will be by MS Excel.

ACCOMPLISHMENTS AND MANAGEMENT IMPLICATIONS

Method sets were prepared using TwoDog to include forested habitat variables associated with DFC's. Existing data is being imported from MS Excel into TwoDog for processing and reporting as needed. Data is being recorded from on-going inventories and keypunched into TwoDog for Forested Habitat Analysis and preparation of Management Prescriptions. Modified methods are available for use by other Refuges and partners interested in forest management for wildlife in the Mississippi Alluvial Valley.

Further streamlining to incorporate reports into GIS for spatial analysis is anticipated.

PARTNERS

Cache River and Bayou Cocodrie National Wildlife Refuges assisted with planning the structure and order of data to be used.

MORE INFORMATION

TwoDog is available for purchase from
www.fountainsamerica.com/twodog/

For the Method set, contact:

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