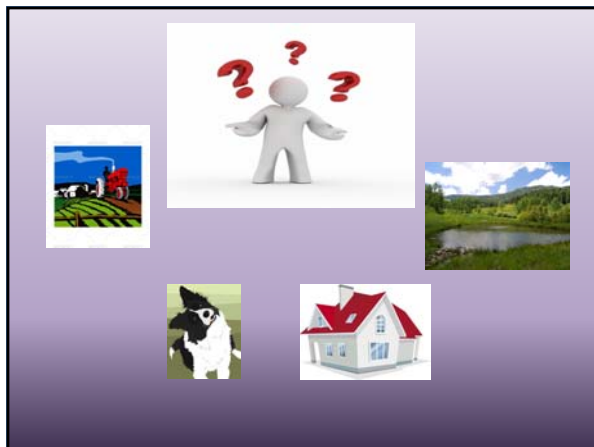


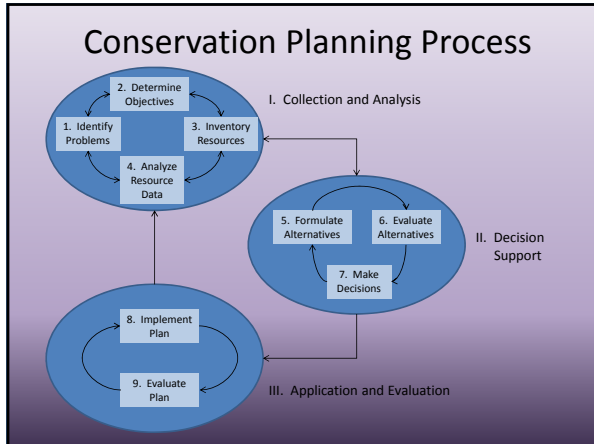


Goals of this presentation...

Lets keep this simple!

1. Awareness
2. Resources





I. Collection and Analysis

1. What is the problem?

2. What are the landowner objectives?
Economic/financial
Social
Environmental

3. Inventory the Resources
SWAPA + H + E

4. Analyze the Resource Data

II. Decision Support

5. Formulate Alternatives

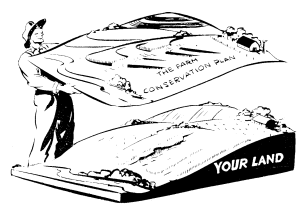
6. Evaluate Alternatives

7. Make Decisions

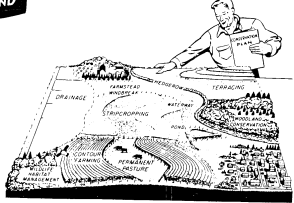
Consider Landowner Objectives!

Economics tools can be very helpful here!

II. Decision Support



8. Implement Plan



9. Evaluate Plan

Goals of this presentation...

1. Awareness
2. Resources

Economics Assessment Tools

Useful for evaluating alternatives in situations where the resource concern(s) and landowner's objectives may be met through multiple alternatives.



Economics Assessment Tools

Two categories of information are all that is needed to get started....

Costs	Benefits
 <p>Installation Costs</p>	  <p>Monetary or Non-Monetary (inc. profits, habitat)</p>
 <p>Operation and Maintenance Costs (O&M)</p>	 
 <p>Lost Production (foregone income)</p>	

Economics Assessment Tools

Examples:

Economic tools utilize cost and benefit information and analyze them in various ways depending on the data available and the goals of the analysis.

Disclaimer: the examples presented on the next few slides are to be utilized as examples only. Do not take these examples of actual on the ground assessments meant to be transferred to a specific conservation plan you are working with a producer to implement.

Benefit Cost Analysis:

Is this a good investment economically?

A producer is interested in improving the management of his pastureland from a very low level of management (where the cow/calves have access to the entire pasture and are not rotated) to a high level of management where the cow/calves are rotated through 8 or more paddocks.

<p>Costs: The cost of the extra fence, watering facilities and pipeline to establish the improved grazing system is \$63/acre.</p>	<p>Benefits: The benefits of the improved system (increased forage yield, increased stocking rate and reduced hay feeding costs) is \$115/ac/year or \$1,700/acre (over 20 years).</p>
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The Net Benefits = Benefits – Costs = \$1,637/ac

Cost Effectiveness Analysis:
What is the most cost effective alternative?

A producer is interested in improving wildlife habitat on her property to increase quail numbers. The biologist has determined that there are three alternatives she could implement that would create adequate habitat to attract quail.

Costs: Alternative 1 costs \$100/ac Alternative 2 costs \$200/ac Alternative 3 costs \$300/ac	Benefits: In this analysis we are assuming that the benefits (quail habitat) are the same for all three alternatives, so no need to try to quantify.
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The most cost effective alternative is alternative 1

Break Even Analysis:
How long will it take to recoup my investment?

A producer is considering a pasture renovation to convert his existing endophyte infected fescue based pastures to non-endophyte grass. He wants to know how long it will take to recover the cost of this investment.

Costs: Up front full pasture renovation costs = \$750/ac	Benefits: The improved cow/calf performance (increased conception rates, increased weight gain) = \$350/ac/yr
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The years to break even on this investment = 4 years.

Conservation Costs

Program Cost Lists

Personal Experience

Extension Service

University Custom Rate Surveys

Crop Budgets

Producer Experience

Census of Agriculture

Ag Statistics

Contractors

Conservation Costs

In Missouri we have the Actual Cost Database

Used to generate the Standardized State Average Cost List

Also available to you for querying cost information

http://fsaintranet.sc.egov.usda.gov/states/mo/moi/Web_Aps/nrcs/actual_cost/mainmenu.asp



MO Economics Tools

The Missouri NRCS Economics webpage has several economic tools that have been developed. All the tools are built in MS Excel.

<http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/econ/stateresources?cid=stelprdb1044088>

The Economics of Renovating Pasture for Cow-Calf and Beef Stocker Operations

The Economics of Converting Cropland or Grassland to Forestland

The Economics of Converting Existing Forestland to Pasture

The Economics of Timber Stand Improvement

The Economics of Improved Grazing Management

More Economic Tools

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/econ/tools/>

- Tools are Organized by Landuse
- > General Resource Planning
 - > General Economic Planning
 - > Crop/Hay
 - > Energy
 - > Forest
 - > Headquarters
 - > Irrigation
 - > Range/Pasture
 - > Recreation
 - > Urban
 - > Wildlife
 - > Watershed Protection
 - > Examples of NRCS Economic Analysis
 - > Other Economic Tools Developed by Non-NRCS Economists

NEDC Economics of Conservation
Planning
www.nedc.nrcs.gov
Economics of Conservation Planning (0000017)

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