

Use of Habitat Equivalency Analysis in NRDs



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HEA - The Good



- Flexible
- Transparent
- Inclusive
- Helps focus on restoration
- Relatively Simple

HEA - The Bad



- Inputs
- Baseline
- Service Loss
- Dueling HEAs
- Attempt at Precision

Keys to Success

- “Good” HEAs go hand in hand with “Good” cooperative assessments.
 - Involve the right people throughout.
 - Interact and communicate frequently.
 - Develop trust and credibility.
 - Consider all options.
 - Understand the suite of drivers and needs.
 - Focus on getting the job done.
 - Develop and keep to a schedule.

Metrics

- Keep them simple, few in number, short (relatively) in duration.
- Decide on them up front, long before restoration is undertaken.
- Don't get hung up on achieving a numerical goal. Nature does what she pleases.

Example



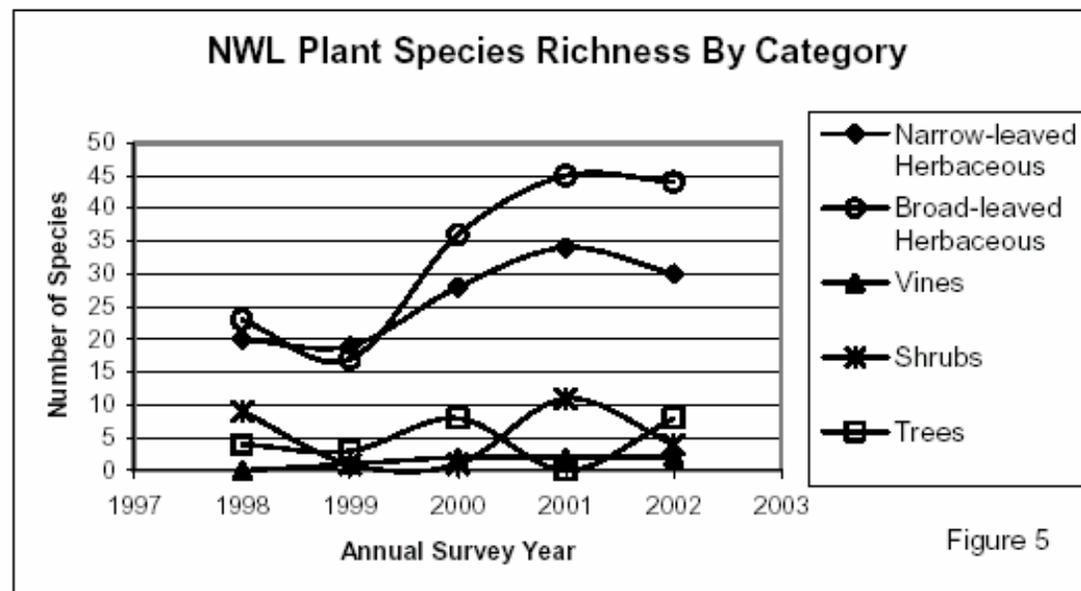
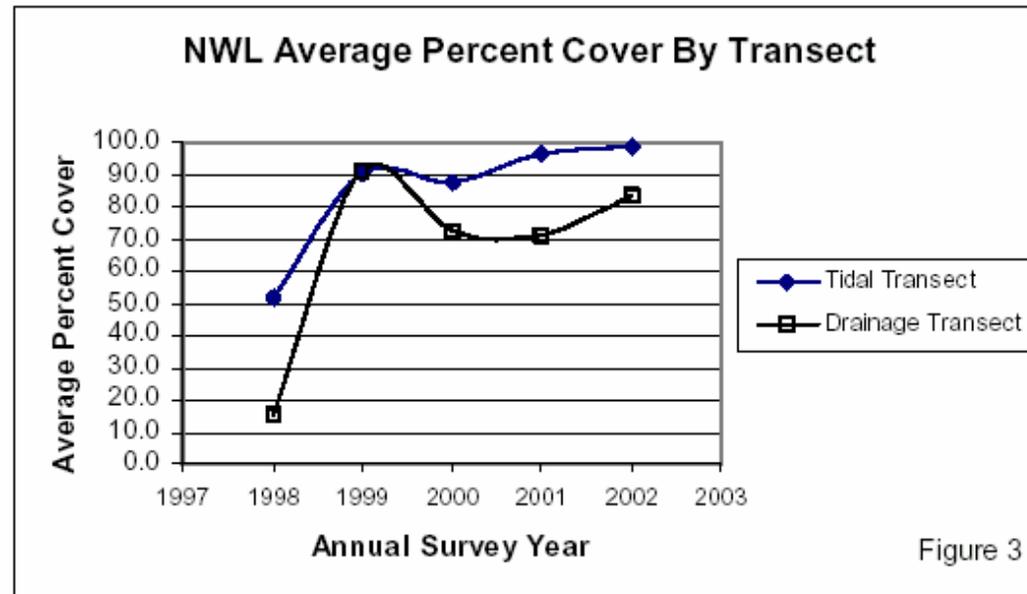
North Wetland under construction

North Wetland ca. 2000



North Wetlands Functional Capacity Units					
	WWA	Planned	Actual	Actual	Actual
		1997	1999	2001	2002
Year	0		2	4	5
Function					
Shorebank Erosion Control	0.09	0.67	0.75	0.75	0.75
Sediment Stabilization	1.3	2.43	2.32	2.43	2.43
Water Quality	1.7	1.96	1.92	2.11	2.11
Wildlife	0.57	1.75	1.67	1.68	2.16
Tidal Fish	0.6	1.42	1.42	1.42	1.42

Evaluation of Planned Wetlands - St. Michaels, Maryland



South Wetlands Functional Capacity Units				
	WWA	Planned	Actual	Actual
		1998	2000	2002
Year	0		2	4
Function				
Sediment Stabilization	3.9	7.1	7.11	7.11
Water Quality	2.9	5.7	6.16	6.16
Wildlife	1.1	4.3	4.27	5.37
Tidal Fish	1.2	2.1	2.51	3.92

Learnings

- HEA (& REA) can be a good, useful tool.
- Don't force precision where it doesn't exist.
- Not a wholly scientific process - can be made rigorous, but seldom worth the extra effort.
- Metrics should be kept simple - watch out for personal bias

Discussion

