

Certifying Sustainable Forestry: the Deer Factor

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Forest Stewardship Council Green Certification

- **Structured process for *verifying* that forest management is conducted in a manner that:**
 - **Sustains local ecosystems**
 - **Sustains local economies**
 - **Sustains local cultures, heritages**
- **Assessment teams perform verification, usually include silviculturalist, forest ecologist, may include economists and sociologists**

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- o Verification uses sustainability standards developed by committee of recognized authorities (ecological, economical, cultural) that:**
 - o Evaluate multiple criteria for 10 separate principles**
 - o Document status of criteria via established indicators**
 - o Utilize verifiers for criteria**

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- o Principles, criteria, and indicators are evaluated by:**
 - o Review of required documentation (management plans, monitoring plans)**
 - o Office visit evaluating compliance with administrative requirements (titles, etc)**
 - o Field visit evaluating compliance with management of forest resources**
 - o Interviews with stakeholders**

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- o Scores are assigned to each principle**
 - o Multiple criteria for each principle**
 - o Five scoring levels: 1 = non-compliance; 5 = exceptional compliance**
 - o Must pass on all principles to be certified as a sustainable operation**

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- o Failure to make the grade results in:**
 - o Precondition – corrective action(s) that must be satisfied prior to being certified**
 - o Condition – corrective action(s) that must be satisfied within designated time period**
 - o Observations may also be made for improving performance, but these are not binding as are preconditions and conditions**

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- o Annual audits determine whether preconditions and conditions are met**
- o Every 5 years must be re-certified**

Who Gets Certified?

- Large public landowners: PA Bureau of Forestry, Michigan DNR
- Large private landowners: Finch Pruyn, The Forestland Group
- Educational institutions: Paul Smith's
- Partnerships: Nature Conservancy and Atlas Timber
- Consultants with pools of landowners

Why Get Certified?

- o **Good PR**
- o **Required by clients (L.L. Bean & Champion Paper)**
- o **Doing the right thing**
- o **Silver bullet**
- o **Economic incentive (not yet, not even in Europe)**

PRINCIPLE #5: BENEFITS FROM THE FOREST

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

PRINCIPLE #5: BENEFITS FROM THE FOREST

- o The sustainability of harvest levels is based on documented data on ... regeneration**
- o Management diversifies forest uses and products, while maintaining forest composition, structures, and functions**

PRINCIPLE #6: ENVIRONMENTAL IMPACT

Forest management shall conserve biological diversity and its associated values...and, by so doing, maintain the ecological functions and the integrity of the forest.

PRINCIPLE #6: ENVIRONMENTAL IMPACT

- Safeguards shall exist which protect rare, threatened and endangered species and their habitats**
- Ecological functions and values shall be maintained intact, enhanced, or restored, including forest regeneration and succession**
- Uneven age silviculture is employed to prevent high-grading and/or diameter limit cutting**

PRINCIPLE #6: ENVIRONMENTAL IMPACT

- o A diversity of habitats for native species is protected, maintained, and/or enhanced, including vertical and horizontal structural complexity**
- o Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and ... avoid the use of chemical pesticides**

PRINCIPLE #8: MONITORING AND ASSESSMENT

- o Monitoring shall be conducted to assess the condition of the forest, management activities and ... environmental impacts**
- o Forest management should include the research and data collection needed to monitor ... regeneration, and ... composition and observed changes in the flora and fauna**

PRINCIPLE #9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests (including habitats for threatened or endangered species)

Deer a Factor in Contiguous Forests



Deer not a factor in forest/farms



Rare herbaceous plants



Ferns and Herbicides



Rare Occurrence



Group Selection Failures



Typical Understory



Deer Impact a Factor in ~ 70% of 20+ assessments

- o Large State Agency – the major condition in 1st and 2nd certifications
- o Large Private Operation – multiple observations and defense of (not) leasing
- o Partnership – failure to recognize altered understory dynamics, need for herbicides
- o Large Private Organization – failed regeneration

Problems

- **Landowners control the vegetation, separate state agency controls deer herd management**
- **How to write conditions that address deer impact which landowners can actually achieve**
- **How to evaluate compliance with conditions**
- **How to engage state agencies to affect change in deer herd within large and small scale landscapes**

Hope and Luck

- **DMAP (deer management assistance program in PA)**
- **Three tough winters in a row and poor mast crops**
- **Low fawn recruitment, overwinter mortality = large-scale drop in deer density**
- **Lag in vegetation response**
- **Potential problem with herd rebound**