BAYFIELD COUNTY FOREST ANNUAL WORK PLAN
January 1, through December 31, 2011

The Bayfield County Forest Work Plan for the 2011 calendar year gives direction and meaning to the County Forest budget, further defines and supplements the Comprehensive Fifteen Year Land Use Plan, and emphasizes current needs of the County Forest. This plan complies with Chapter NR47 Wisconsin Administrative Rules for the administration of the County Forest Administrator Grant Program.

ALLOWABLE TIMBER HARVEST

The mission of the Bayfield County Forestry Department is to manage, conserve, and protect the forest resources of the County Forest. Multiple use management of these resources will provide a wide variety of forest products and amenities for current and future generations through the use of sustainable forest management practices.

Timber harvests are important for the economic well being of Bayfield County, as well as for the health and vigor of the forest. One of the objectives of timber management is to produce a sustained yield of forest products, in perpetuity. This is realized through the analysis and scheduling of forest stands and, ultimately, the development of sustainable annual allowable harvest goals. Professional implementation of proper forest management and harvest techniques is essential. Existing reconnaissance data, along with thorough field inspections conducted by department foresters, will be used to determine which stands are ready for treatment.

The sustainable allowable harvest goal for the Bayfield County Forest in the calendar year 2011 is 5,108 acres. This represents a 823 acre (19%) increase over the harvest goal for 2010. Table 1 displays the 2011 allowable harvest goal (acres) per primary timber type:
Table 1: 2011 Allowable Harvest Goal

<table>
<thead>
<tr>
<th>Timber Type</th>
<th>Goal (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspen</td>
<td>1,189</td>
</tr>
<tr>
<td>Northern Hardwood</td>
<td>914</td>
</tr>
<tr>
<td>Red Oak</td>
<td>808</td>
</tr>
<tr>
<td>Paper Birch</td>
<td>200</td>
</tr>
<tr>
<td>Scrub Oak</td>
<td>85</td>
</tr>
<tr>
<td>Red Pine</td>
<td>978</td>
</tr>
<tr>
<td>Jack Pine</td>
<td>516</td>
</tr>
<tr>
<td>White Pine</td>
<td>50</td>
</tr>
<tr>
<td>Swamp Conifer</td>
<td>142</td>
</tr>
<tr>
<td>Swamp Hardwood</td>
<td>126</td>
</tr>
<tr>
<td>Fir/Spruce</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>5,108</td>
</tr>
</tbody>
</table>

Figure 1 displays the annual allowable harvest goals over the past six years. Since 2006, the harvest goals have increased approximately 63%; from 3,134 acres in 2006 to 5,108 acres in 2011. This increase is due to a variety of factors, some of which include: improved reconnaissance information, a significant increase in the number of stands reaching management age (particularly in the aspen and red pine types), the inclusion of swamp hardwood and conifer, and a change in the management approach of the aspen, red oak and northern hardwood timber types. The allowable harvest goals for aspen and red pine will continue to increase.

Figure 1:
FOREST INVENTORY

Approximately 10,000 acres of County Forest will be re-inventoried. Previous goals were to re-inventory approximately 10% of the forest each year, or roughly 17,000 acres. The new direction will be the implementation of a 15 year re-inventory cycle. To date, roughly 70,000 acres remain to be re-inventoried. The goal is to complete this over the next 7 years. Once completed, it will put the department on pace to achieve the 15 year re-inventory goal. At which time, a 15 year, modified re-inventory cycle will be put in place. In the meantime, inventory priorities will be placed on forest compartments that contain a larger percentage of old data (≥20 years old), as well as compartments that contain a larger percentage of stands prescribed for management in the near future.

REFORESTATION

The following reforestation efforts are planned for 2011:

**Spring Planting**: Tree species planted during the 2011 planting season will be a little more diverse when compared to previous years. The department will be planting 255,000 Red Pine, 94,000 Jack Pine, 29,000 White Spruce, 26,000 Tamarack and 16,000 White Pine on 507 acres. All seedlings are containerized stock and will be hand planted by contract planters.

**Site Preparation and Release**: 464 acres will be trenched for planting and 350 acres will be trenched for Jack Pine seeding. Approximately 200 acres will be aerial sprayed for planting (site preparation) and 406 acres will be aerial sprayed for red pine release.

**Natural Regeneration**: Thousands of acres of natural regeneration will occur on a variety of forest types. The exact amount is solely dependent on the total number of acres harvested in 2010. Forest types such as northern hardwoods and aspen regenerate naturally via seed, stump sprouting and/or coppicing (vegetative sprouting from existing root system) and require very little additional input from the department. However, the natural regeneration of hardwood forest types such as red oak and paper birch do require additional inputs from the department. Examples of additional inputs include: pre or post sale site scarification to prepare a favorable seed bed and reduce competition, pre or post sale burning to reduce competition from undesirable tree seedlings and prepare favorable seedbeds, and deer browse protection i.e. fencing, repellents, etc. to improve the tree seedlings chance of survival. These additional inputs occur when opportunities arise and are treated on a case by case basis.

**Seedling Counts**: All planting sites and many areas that were regenerated naturally require survival counts. Data collected from the counts are used to determine stocking levels of desired tree species and, ultimately, to evaluate the success rate of the reforestation attempt. Seedling counts are administered at one, two, three and five years after the regeneration attempt on most planted sites. Seedling counts on naturally regenerating hardwood stands are administered beginning at years two or three and may include an additional count at year seven. In 2011, seedling counts will be administered on roughly 3,000 acres of planted and naturally regenerated sites.
**PRESCRIBED BURNING**

Prescribed fires will be used to maintain portions of the Pine Barrens in the Township of Barnes. Approximately 240 acres will be treated, half in the spring and half in the fall. Prescribed fires will also be used to facilitate oak regeneration on approximately 200 acres. Seedling counts will be administered prior to burning and will provide baseline information that will be used to establish the effectiveness of these treatments.

**WILDLIFE**

A number of wildlife projects will again be undertaken in 2011. The majority of wildlife habitat improvement work conducted on County Forest land will be accomplished through funding from Wisconsin DNR grant programs, specifically, the County Conservation Aids and Nickel-an-Acre programs. The Nickel-an-Acre program reflects a change from the previous Dime-an-Acre program. As indicated in the name, the program funding was cut in half starting in 2010 and will continue to be funded at a nickel an acre into the foreseeable future. The County Conservation Aid grant requires a 50% County match on eligible projects.

The Conservation Aids project for 2011 have yet to be determined. There is approximately $4,218 available for eligible projects.

The Nickel-an-Acre grant totals $8,467. This grant will be used to aid in the funding of any or all of the following projects/activities:

- Hunter walking trail repair, clearing, and mowing.
- Site prep and seeding for jack pine in the sand barrens.
- Herbicide for wildlife opening maintenance.
- Mechanical site prep for white birch regeneration.
- Prescribed burning of wildlife openings and oak regeneration areas.
- Fish habitat projects.
- Habitat projects on old homesteads.
- Breeding bird surveys.
- Invasive species eradication.
- Deer exclosures for red oak regeneration (fencing).

**ACCESS MANAGEMENT**

The Access Management Plan will continue to be implemented in accordance with the Bayfield County Forest Comprehensive Land Use Plan. Criteria for classification of roads will be clarified and then applied when designating existing and planned transportation networks. The access management plans for the Cable and South Barnes blocks are complete. Access management for the remainder of the County Forest will be completed in 2011 and incorporated into the plan.

The Forestry Department will continue to maintain 36.09 miles of Primary Forest roads, for which we receive County Forest Road Aids. The Department will continue to plan and develop
additional forest roads and trails as the need arises for later entry into the County Forest Road program.

**BAYFIELD COUNTY FOREST PLAN**

The existing County Forest Comprehensive Land Use Plan for the period 2006 – 2020 will be amended to reflect changes and/or updates. Some items that require updating in 2011 include, but are not limited to:

- Access management.
- Integrated Resource Management Unit (IRMU) summaries.
- IRMU boundaries.
- Northwest Sands Barrens Wildlife Area Management Plan summary.
- Timber sale contract language.
- Firewood permit language.
- Timber sale rutting policy.
- Forest certification (addition of FSC).
- Camping permit.

**OTHER ACTIVITIES**

Recreation:

The department will continue to work with the County Tourism and Recreation Department and interested user groups on recreation activities occurring on the County Forest. The demand for recreational use on the County Forest continues to grow. The re-routing and realignment of snowmobile and ATV trails continues to improve the safety and lessen the environmental impacts of these uses. Requests for non-motorized trail systems are on the rise, especially for mountain biking, hiking, cross country skiing and horseback riding. Requests for additional trails will be treated on a case by case basis, as per the access management plan.

Trail counters and a voluntary donation tube were placed on the Jerry J. Jolly/Pike’s Creek trail. The counters were strategically placed in an attempt to acquire information on how often the trail is being used. The data received from these counters will provide the County with valuable information needed to determine future direction. Counters will also be used to monitor other recreational locations in 2011, most notably, the lost creek falls trail head.

The lost creek falls trail will need some minor attention. The trail needs to be better defined and signed, including some brush work and the removal of a few hazard trees, and possibly re-routed in areas to avoid sensitive soils.

Insects and Disease Salvage Timber Sales:

The salvaging of timber killed by the Two-lined Chestnut Borer and Jack Pine Budworm was completed in 2009. Reforestation of these areas will continue into 2011. The Department is continuing to monitor the effects of forest pathogens such as the Jack Pine Budworm, Two-Lined
Chestnut borer, Emerald Ash borer, and Gypsy Moth. If any additional sites containing a significant amount of damage are discovered, they will be promptly managed.

**Land Acquisition:**

The department will continue efforts to acquire private properties on a willing seller, willing buyer basis when advantageous to the long term goals for the Bayfield County Forest.

Submitted by Jason Bodine, Bayfield County Forest Administrator, December 14, 2010.
STATE OF WISCONSIN

BAYFIELD COUNTY

I, Scott S Fibert, Bayfield County Clerk, hereby certify that the foregoing is a true and correct copy of Volume 21, adopted by the Bayfield County Board of Supervisors at their meeting held on the 15th day of December, 2009.

Scott S. Fibert, Bayfield County Clerk