

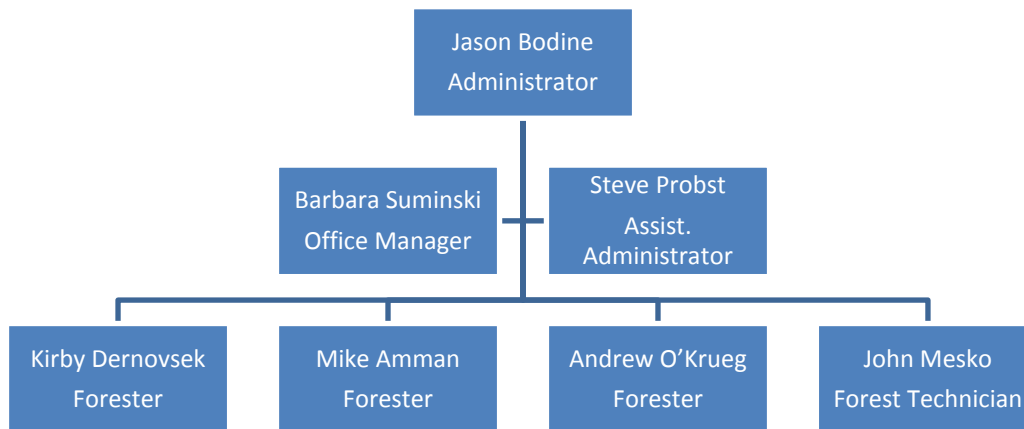
**BAYFIELD COUNTY FORESTRY AND PARKS DEPARTMENT
ANNUAL ACCOMPLISHMENT REPORT
FOR THE CALENDAR YEAR
2010**

FORESTRY COMMITTEE

Shawn Miller, Chair
Marco Bichanich, Vice-Chair
William Kacvinsky

Kenneth Jardine
John Bennett

DEPARTMENT STAFF



LAND AREA

The present County Forest acreage is as follows:

Barnes	39,362.49	Cable	5,556.33	Oriente	4,720.00
Bayfield	32,792.56	Clover	5,386.57	Port Wing	8,876.18
Bayview	12,951.56	Hughes	24,056.56	Russell	8,570.82
Bell	14,585.03	Iron River	6,042.22	Tripp	6,543.77

Official County Forest Acreage: 169,444.09

There are approximately 3,600 acres of County tax title lands, not including lots and small parcels, in addition to the above listed County Forests Lands. On occasion, the Forestry Department will monitor these parcels for land sales and timber sales, checks for trespass, and negotiate road easements and sand and gravel permits.

COMPREHENSIVE LAND USE PLAN

A comprehensive land use plan that will guide the management of the County Forest for the next 15 years was developed in 2005 and approved by the County Board in January 2006. This plan will be periodically reviewed and amended as the need arises. Amendments must be approved by the County Board of Supervisors. No amendments were made to the plan in 2010.

FOREST MANAGEMENT

The forest management program is one of the most significant responsibilities of the Department. There are three major facets of the program: 1) forest management (timber sale establishment), 2) reforestation, and 3) forest reconnaissance. The quality and quantity of goal accomplishments, as well as the sold value of timber sales, are some of the best indicators used to evaluate performance. Below are summaries of the major forest management priorities.

- 1) Sustainable harvest goals: Sustainable timber harvest goals for every major forest type are calculated based upon sound silvicultural guidelines and principles. Table 1 displays the sustainable harvest goals and accomplishments of the timber sale program by major forest type since 2006. In summary, 3,657 acres were managed in 2010 (an increase of approximately 10% from 2009).

Table 1: Bayfield County Forest Sustainable Harvest Goals and Accomplishments (acres)

Species	2006		2007		2008		2009		2010		Average	
	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.	Goal	Accomp.
Aspen*	670	765	620	729	620	716	850	928	870	853	726	798
Nor. Hdwd	683	631	700	720	800	803	900	721	900	418	797	659
Red Oak	656	741	550	592	550	533	670	554	670	607	619	605
Paper Birch	200	100	200	79	200	60	200	16	200	156	200	82
Scrub Oak	85	103	85	90	85	89	85	15	85	167	85	93
Red Pine	640	583	584	599	752	731	749	572	870	743	719	646
Jack Pine	0	40	350	286	354	353	405	413	540	518	330	322
White Pine	100	0	100	38	50	6	50	76	50	15	70	27
Fir/Spruce	100	0	100	6	100	0	100	33	100	180	100	44
Total	3,134	2,963	3,289	3,139	3,511	3,291	4,009	3,328	4,285	3,657	3,646	3,276

* Greater accomplishments are a result of managing some of the backlog

Table 2 displays a summary of how the accomplishments for the sustainable timber harvest program are allocated. In general, most of the harvest goal is in the form of a timber sale, however, there are occasions when a stand is updated and managed at a later date. Updates typically occur when a stand has not attained the predicted amount of growth in between harvests, when the data describing the stand is incorrect, or when the stand is removed from management due to a restrictive feature i.e. riparian buffers or inoperable slopes. The differences in total accomplishments displayed in Tables 1 and 2 are a result of managing non-forested stands i.e. grass or upland brush. These stands show up in the total accomplishments, but not in the goals developed for forested stands.

Table 2: Bayfield County Forest Sustainable Harvest Summary (acres)

Year	Management Goal	Timber Sale Establishment	Stand Update	Total Accomplishments
2006	3,134	2,560	421	2,981
2007	3,289	2,950	221	3,171
2008	3,511	2,736	573	3,309
2009	4,009	3,157	243	3,400
2010	4,285	3,331	326	3,657
Average	3,646	2,947	357	3,304

- 2) Timber sale program: Bayfield County offers two timber sale lettings per year, one in the spring and one in the fall. Table 3 displays the summary of timber sale offerings since 2006. This table describes the total number of sales sold per year, as well as total acres, the total value of the winning high bids, the average bid value per acre and total revenues received from the sale of timber. In summary, the total receipts from timber harvested during calendar year 2010 amounted to \$2,047,663.00. During this period, the Department awarded 40 new timber sale contracts, covering 3,218 acres with an estimated value of \$2,404,178.00. On average, bid prices were down approximately 8% from 2009.

Table 3: Bayfield County Forest Timber Sale Summary

Calendar Year	Sales Offered	Acres Offered	Sales Sold	Acres Sold	Acres Not Sold	Timber Sale Bid Values	Bid Value per Acre	Timber Revenues
2006	49	2,976	38	2,245	731	\$1,752,843	\$781	\$1,615,584
2007	59	3,771	45	3,157	614	\$2,140,897	\$678	\$2,167,156
2008	58	3,546	55	3,507	39	\$2,381,513	\$679	\$2,621,308
2009	45	3,297	42	3,100	197	\$2,510,601	\$810	\$2,305,259
2010	40	3,218	40	3,218	0	\$2,404,178	\$747	\$2,047,663
Average	50	3,362	44	3,045	316	\$2,238,006	\$739	\$2,151,394

Table 4 displays the total volume of timber harvested from Bayfield County Forest timber sales from 2006 through 2010. Pulp (cords) and logs (Mbf – thousand board feet) are displayed for each primary timber type. For the sake of comparison, all tonnage sales (chips) were converted to cords (approximately 20% off all timber sales are sold by the ton). The table also displays the total amount of timber sale revenue received each year. In summary, there was approximately 4% less total volume harvested in 2010 when compared to 2009.

Table 4: Bayfield County Forest Timber Harvest Volume Summary (pulp in cords and logs in thousand board feet)

Species	2006		2007		2008		2009		2010		Average	
	Pulp	Logs	Pulp	Logs	Pulp	Logs	Pulp	Logs	Pulp	Logs	Pulp	Logs
Aspen	8,037	0	15,598	0	19,441	0	15,048	0	15,041	3	14,633	1
Mx. Hardwood ¹	12,137	335	18,062	182	21,609	181	17,470	182	16,735	261	17,202	228
Oak	7,674	540	9,489	333	14,886	643	6,678	516	9,807	782	9,707	563
Paper Birch	1,078	17	2,477	18	2,231	26	901	7	736	43	1,485	22
Basswood	1,213	174	1,126	119	1,161	159	1,204	525	1,439	116	1,229	219
Red Pine	4,845	0	8,253	0	13,052	0	6,692	0	4,554	0	7,479	0
Jack Pine	2,356	0	10,945	0	9,218	0	8,410	0	6,572	0	7,500	0
White Pine	0	0	445	0	1,247	0	715	0	651	0	612	0
Other Conifer ²	96	0	239	0	521	0	500	0	302	0	332	0
Fuelwood ³	0	0	495	0	771	0	2,017	0	1,730	0	1,003	0
Total	37,436	1,066	67,129	652	84,138	1,009	59,633	1,230	57,566	1,205	61,181	1,032
Revenue	\$1,615,583.93		\$2,167,155.74		\$2,706,360.33		\$2,305,259.00		\$2,047,663.00		\$2,168,404.40	

¹ Maple, yellow birch, ash

² Spruce, Fir, Tamarack

³ Mixed species used in wood boilers

- 3) Reforestation program: Reforestation is an integral part of forest management. Bayfield County manages one of the largest public land reforestation programs in the state of Wisconsin. In the spring of 2010, 563 acres were planted. All of the red pine was hand planted with containerized stock. In total, over 250,000 red pine seedlings and 170,000 jack pine seedlings were planted in 2010. Also, over 900 acres were prepared for planting. The DNR fire plowed 118 acres, 363 acres were power trenched and 348 acres were treated with herbicide. A 40 acre prescribed burn was implemented to facilitate red oak regeneration and nearly 1,700 acres of previous reforestation attempts were monitored. In addition, two deer exclusions fences are maintained to monitor the effects that deer browsing has on regenerating red oak, paper birch and white pine. Table 5 displays the summary of the reforestation program from 2006 through 2010.

Table 5: Bayfield County Forest Reforestation Program Summary 2006 - 2010 (acres)

Year	Planting			Seeding	Site Preparation				Maintenance		Monitoring
	Red Pine	Jack Pine	White Pine	Jack Pine	Trench	Fire Plow	Scarify	Spray	Rx Fire	Spray	Survival Counts
2006	203	289	0	0	519	23	123	406	0	1,042	1,918
2007	406	23	144	0	535	93	19	308	97	0	2,121
2008	378	207	24	0	796	88	0	442	0	0	1,683
2009	487	415	0	0	726	72	0	348	40	0	2,652
2010	367	196	0	0	363	118	0	420	42	305	2,183
Avg	368	226	34	0	588	79	28	385	36	269	2,111

- 4) Forest Reconnaissance Program: forest reconnaissance, or updating stand information, is a critical aspect of the forest management program. The development of annual and long term goals is nearly entirely dependent on the accuracy of information for each stand in the database. Maintaining accurate and up-to-date stand information is essential.

From 2003 through 2008, the direction of the Department was to update approximately 10% of the acreage base (17,000 acres), primarily through entire compartments, on an annual basis. Starting 2009, the direction was changed to 10,000 acres per year. Through 2010, nearly 63% of the forest (approximately 106,000 acres) has been updated. Table 6 displays the summary of compartment/stand updates from 2006 through 2010.

Table 6: Bayfield County Forest Stand Updates (acres)

Year	Goal	Accomplishment
2006	17,000	17,239
2007	17,000	11,002
2008	17,000	9,807
2009	10,000	2,872
2010	10,000	4,079
Average	14,200	9,000

ROADS AND TRAILS

The forestry department maintains over 36 miles of primary gas tax roads on the forest. These roads serve as primary access routes into portions of the county forest. A few of the roads located in the Towns of Barnes and Hughes also play an integral role in the wildfire protection plan that was developed in 2006. The Department performs routine annual inspections on every mile of primary road to monitor for both road quality and invasive species.

Trails on the county forest are used for a variety of recreational purposes. Cross country skiing, mountain biking, hiking and dog sledding, as well as snowmobile and ATV use are some of the activities permitted on designated county forest trails. In addition to daily general recreational use, trails on the county forest also play an integral role in numerous popular organized events. Such events include, but are not limited to, the American Birkebeiner, Apostle Islands Sled Dog Race, Chequamegon Fat Tire Festival and the Cable Area Off-Road Classic mountain bike race. In 2010, there were a total of 7 organized events that utilized portions of trails located on the Bayfield County Forest. Table 7 displays the approximate number of miles per designated trail type that are located on county forest land.

Table 7: Summary of Designated Recreational Trails on Bayfield County Forest land (miles)

Snowmobile	Walking	Dog Sled	ATV	Cross-Country Ski	Mountain Bike	Total
89	79	44	38	31	21	302

The Department staff continues to work closely with all recreational user groups on the establishment and/or maintenance of trail systems. Recreational use agreements with organized clubs continue to be pursued at every opportunity.

PERMITTED USES

Permits are issued by the Forestry and Parks Department for sand and gravel, right-of-ways, timber storage, private property access, fuelwood, miscellaneous forest products, and recreational activities. Table 8 displays a summary of permits issued on the forest from 2006 through 2010. Firewood permits comprise the vast majority of the total permits issued on an annual basis. In 2010, a record 436 firewood permits were issued, an increase of over 90% since 2006.

Table 8: Bayfield County Forest Summary of Issued Permits

Year	Fire Wood	Balsam Boughs	Cones	Christmas Trees	Access	Disabled Hunting	Storage
2006	229	11	1	3	3	2	1
2007	259	12	3	2	2	3	1
2008	360	8	0	1	2	3	1
2009	423	5	1	1	0	3	1
2010	436	5	1	1	3	3	2
Avg.	341	8	1	2	2	3	1

Sand and gravel is extracted and sold from county managed pits, to be used on approved municipal projects. All revenues received from the sale of sand and gravel are deposited in a non-lapsing account for eventual site reclamation. Table 9 displays the amount of material and revenues received from 2006 through 2010.

Table 9: Bayfield County Forest Sand and Gravel Summary

Year	Yards	Revenue
2006	330	\$165.00
2007	10,335	\$5,167.50
2008	6,120	\$3,060.00
2009	300	\$150.00
2010	12,589	\$9,441.75
Avg.	5,935	\$3,596.85

WILDLIFE HABITAT IMPROVEMENT/MONITORING

Forest openings, dominated by forbs and grasses, are important habitat for a great diversity of wildlife species. Since the mid 1970's, numerous, small forest openings have been maintained on the forest to encourage this diversity of habitat. The openings are relatively small in size

(average about 1 acre) and are spread throughout the county forest (although they are more numerous in the peninsula). Each opening is treated about every five years to discourage encroaching woody vegetation. In 2010, 45 wildlife openings, totaling 44 acres were maintained by tractor mowing. An additional 50 openings, totaling 57 acres, were treated by hand, using a mix of herbicide and cutting. Table 10 displays a summary of the wildlife opening maintenance program from 2006 through 2010.

Table 10: Bayfield County Forest Summary of Maintained Wildlife Openings by Treatment

Year	Mowed Number	Mowed Acres	Hand Treated¹ Number	Hand Treated¹ Acres	Total Number	Total Acres
2006	48	46.8	56	33.4	104	80.2
2007	39	36.9	81	85.2	120	122.1
2008	44	50.0	77	59.6	121	109.6
2009	62	69.5	53	24.2	115	93.8
2010	45	44.3	50	57.2	95	101.5
Average	47.6	49.5	63.4	51.9	111	101.4

¹ using a mix of herbicide and hand cutting

In 2008, the county forest developed a breeding bird monitoring project. The goal of this project is to survey the entire county forest by 2011. In 2008 and again in 2009, 350 permanent diurnal and 40 nightjar points were completed. An additional 297 diurnal and 17 nightjar points was completed in 2010. Once the 2011 portion of the survey is complete, the entire forest will have been surveyed. Over 1,200 diurnal and 200 nightjar points will have been taken. The results of this survey will be used to measure bird/habitat associations, anticipate how forest management may influence these relationships and predict general species occurrence.