Turtle Flambeau - Trude Lake Property Owners' Association, Inc.

Volume 2
Issue 1

Words from your president

Spring/Summer 1997

Here we are preparing for the second annual meeting of our infant organization. We are growing! We now have 51 entities — 87 voting members. In my opinion — great progress in less than a year.

Our board of directors has met twice — we feel the direction of our association is to:

- increase our membership
- be a vehicle to inform and educate ourselves about our lake
- get involved in projects on our lake.

We ask you to talk to your neighbors and invite them to join. We encourage you to attend our annual meeting on June 14 and the July 9 tour. Managers from DNR will accompany us on the tour and explain the state's program for managing our lake.

Please study the "Purple Loosestrife" program discussed on Page 2 of this newsletter and become a part of it. Note the "water quality" program on the agenda for the annual meeting. Be at the meeting to learn more about this.

Under miscellany

- **Garbage** — It has been my observation that garbage is being deposited at the boat landings by those who are not campers or anglers. It would be well for us to see that such garbage isn't dropped off at the landings. Further, I do not hesitate to tell the camper or angler that we expect them to keep the landings and camp sites clean. I would hope you would do the same.

- **Committees** — We have not used our committees as yet; however, we will. We need more members on the committees. Please sign up at our annual meeting or give me a call at 583-4461.

- **Proxy vote** — Our by-laws provide for proxy voting at the annual meeting. If you can't attend and want someone also to vote for you, please provide them with a short note stating they can cast your votes at the annual meeting.

- **Lake Tides** — A publication of the University of Wisconsin Extension Service tells you about opportunities and problems involving lakes. It's free and very educational. You can obtain a copy by writing to UWEX - Lake Management Program, College of Natural Resources, UWSP, Stevens Point, WI 54481, or sign up at the annual meeting for a subscription.

A big "thank you" to Linda Zumpf. She has graciously handled the production and mailing of our newsletter, a very professional job!

See you at the annual meeting,

Paul Gottwald
President

Volunteers needed

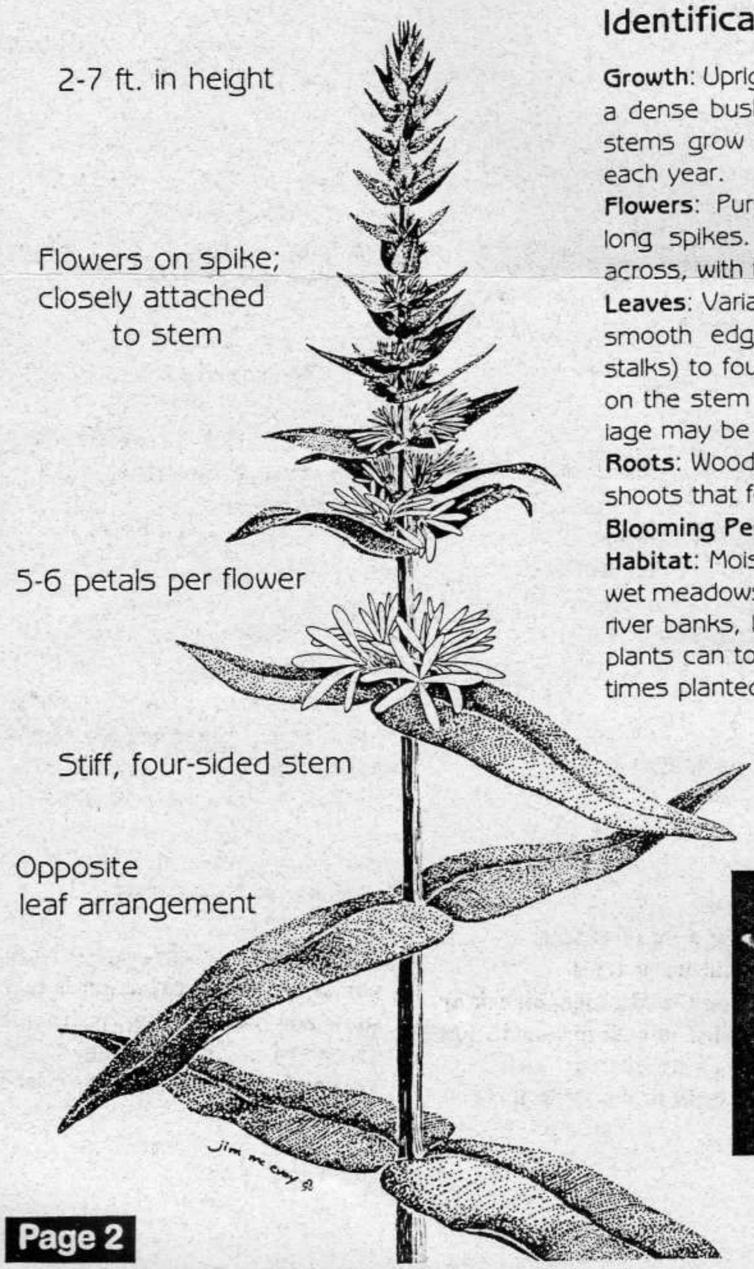
Purple Loosestrife Survey

by Rick Shukes

An attractive but deadly threat has been found on the TFF (Turtle Flambeau Flowage). It's attractive because it's a beautiful flowering plant and deadly because its spread can have devastating effects on wildlife.

Purple Loosestrife is native to Europe and Asia. After being introduced to North America, it managed to escape the specialized insects and diseases that keep it in check in its native lands. Free from these natural controls, Loosestrife gained a competitive edge over our native wetland plants. This advantage, along with prolific seed production and a large, hardy growth, allowed Purple Loosestrife to invade our wetlands to the near total exclusion of most other vegetation; it literally shades everything else out. Loosestrife's numbers and rate-of-spread have increased rapidly in the Midwest during the past 10 to 15 years. As a result, not only is our diverse wetland vegetation (including rare and endangered plants) threatened, but also most wildlife that depend upon native vegetation for food and shelter. Once a wetland is dominated by Loosestrife, traditional residents such as muskrat and waterfowl decline in numbers significantly. Others, such as marsh wrens and least bitterns, are displaced completely from the wetland. Loosestrife itself provides habitat and food for few wildlife species. Once Loosestrife begins to invade, canopy closure is likely and a virtual biological "desert" develops underneath.

Purple Loosestrife spreads primarily by seed, but can also spread from broken-off stems that root themselves in moist soil. Loosestrife plants produce over 100,000 seeds a year. These tiny seeds can live in the soil for many years. Although most fall within a few yards of the parent plant, water, animals and humans can transport seeds long distances. Horticultural use of Purple Loosestrife probably caused its initial establishment in many areas of Wisconsin.



Identification

Growth: Upright, semi-woody, hardy perennial with a dense bushy growth of one to 50 stems. The stems grow four to eight feet tall and die back each year.

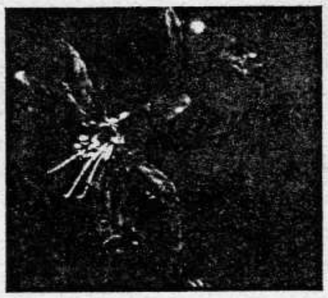
Flowers: Purple to magenta, and numerous on long spikes. Individual flowers are ½" to ¾" across, with five to six petals.

Leaves: Variable (usually opposite), linear shaped, smooth edged, and attached directly (without stalks) to four-sided stems. Sometimes alternate on the stem or are even bunched in whorls. Foliage may be hairy.

Roots: Woody taproot with numerous fibrous side shoots that form a dense mat.

Blooming Period: Early July into early September.

Habitat: Moist soil to shallow water sites, such as wet meadows and pastures, marshes, stream and river banks, lake shores and ditches. Established plants can tolerate dry conditions, and are sometimes planted in lawns and gardens.



Any sunny wetland is susceptible to Purple Loosestrife invasion. But disturbances such as water drawdowns, damaged vegetation or exposed soil greatly accelerate the process by providing the substrate and sunlight exposure needed for germination. A Loosestrife invasion usually begins with a few pioneering plants. These first plants may not spread for several years as they build up a large seed bank in the soil. When the right disturbance occurs, the Loosestrife often spreads rapidly. Complete takeover of a wetland rarely occurs over night, however. More like a one-way ratchet, the Loosestrife persistently takes space, never giving any up.

Purple Loosestrife was first found on the TFF in 1989 near Murray's Landing. It is likely this original seed source was transported there on a boat or trailer. Since that time, the DNR and local property owners have found a few other Purple Loosestrife plants within the flowage. It is imperative that these initial pioneering plants be destroyed before they get a stronghold. For this reason, the Turtle-Flambeau - Trude Lake Property Owners' Association is cooperating with DNR on conducting a Purple Loosestrife Survey this summer. The survey will involve volunteers traveling by boat over mapped routes of the TFF and marking and mapping any Purple Loosestrife found.

The survey routes are short enough that they can be covered in one to two hours. A training session for volunteers will be conducted at the June 14 summer meeting at Carow Park in Mercer, by a DNR biologist. Route packets including maps, samples, instruction sheets, colored marking flagging, and plastic bags will be distributed during a two-week period between July 19 and August 3. This is a time period that Purple Loosestrife is in bloom and easily identified yet before seeds have dropped.

This is a perfect opportunity for those of us who live on, and love, this water to get involved in its protection. For more information about the survey, please attend the June 14 meeting or call Rick Shukes at (715) 476-3829. ❖

What's happening in the

Turtle-Flambeau scenic waters area

by Roger Jasinski
DNR Property Manager

New publication

We have a new brochure describing the Flowage and surrounding state-owned lands. The new brochure includes a large color map showing campsite locations, boat landings, state-owned lands and other features. Additional publications about the Flowage which are still available include an auto tour, a bird list, a children's activity booklet, and an annual fishery summary.

New developments

Construction of a toilet building at Springstead Landing will begin in mid-May. At the same time, new piers will be installed which will provide better access including accommodations for persons with physical disabilities.

DNR road grants have been awarded to the town of Mercer for additional improvements to Popko Circle and to the town of Sherman for improvements to Murray's Landing Road.

Recreational survey

In conjunction with the fisheries creel survey, we will be conducting a recreational survey on the Flowage this year. You may encounter one of the clerks doing user interviews while you are out on the water this summer. We will be gathering information on campsite occupancy, watercraft use, demographics of Flowage visitors, and visitor opinions. We hope to determine if changes are necessary in how we manage DNR facilities.

Water levels

There has been a lot of concern expressed about water level management on the Flowage, especially the last two winters with the significant drawdowns we experienced. The Flowage was built primarily to serve two purposes, those being: providing continuous water flow for downstream hydroelectric dams, and providing flood protection to downstream areas. This means storing water when it is plentiful and releasing water when conditions are dry.

In 1990, prior to the department acquiring lands surrounding the Flowage, an agreement was reached with Chippewa and Flambeau Improvement Company to limit the extent of drawdowns. Basically, the agreement limits summer drawdowns to 4 feet and winter drawdowns to 8 feet.

The annual water level cycle therefore proceeds as follows with some variation based on the amount of precipitation we receive:

✘ *May - June* — Generally the Flowage is at full pool by May 1 and stays fairly close to full until precipitation starts to taper off towards the latter part of June.

✘ *July - September* — During the dry time of mid- to late-summer water levels are gradually lowered to supplement flows in the Flambeau River downstream from the dam. Usually, we reach maximum summer drawdown about the first part of September.

✘ *October - November* — Fall typically produces heavy rains. Depending on precipitation, refill of the Flowage can begin as soon as early September but really accelerates October 1 when the Rest Lake Dam starts draining water into the Flowage. Refill is normally completed by the time we have ice cover.

✘ *December - February* — During the winter, all the precipitation is tied up in snow and ice, so as far as the rivers are concerned this is a dry time of year. To supplement downstream river flows, a second annual drawdown begins in December and continues through the winter to a maximum of 8 feet.

Continued on Page 6, Column 1

Winter of 1997 — Turtle-Flambeau Flowage Deer Herd

by Jeff Wilson

Wisconsin's famous ecologist, Aldo Leopold, once said "A boy does not tremble when he sees a golf ball but I should not like to own the boy whose hair does not lift his hat when he sees his first deer."

Besides eagles, ospreys, and loons, one of the most often viewed wildlife species on the TFF is the white-tailed deer. Though common throughout Wisconsin, recreation surveys have shown that the white-tail is the most sought after watchable wildlife species in the state. Along with its "big game" status, it is little wonder the white-tailed deer is referred to as the "sacred cow" of Wisconsin.

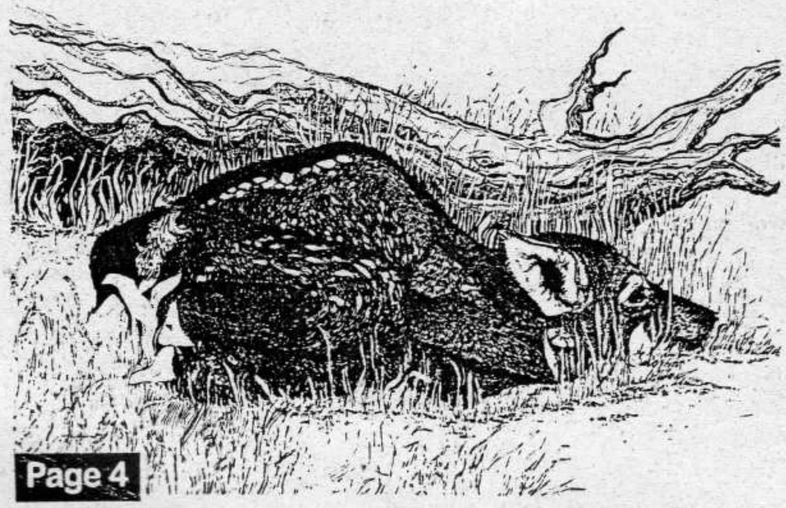
This past winter was especially hard on the TFF deer herd. It was the second winter in a row with severe weather conditions. The DNR records snow depth and temperature conditions throughout northern Wisconsin and formulates a Winter Severity Index (WSI) to measure the effects of winter conditions on deer. It is calculated by the number of days snow depth exceeds 18" and cold temperature drops below zero degrees fahrenheit. A WSI total above 90 points means deer mortality is taking place. This winter's total for the TFF area is 140. Last year's total was 190. The realization of these numbers was felt this past summer when another DNR survey, the summer deer observation survey, showed that lowest fawn/doe ratios measured since the 60's.

No doubt, with a second hard winter for deer, this spring's fawn crop will again take a hard hit. White-tailed deer females may abort their fawns or the fawns may die shortly after birth if stressed by a lack of food or harsh physical conditions. This is, of course, winter related and results in reduced fawn crop in the spring of a severe winter.

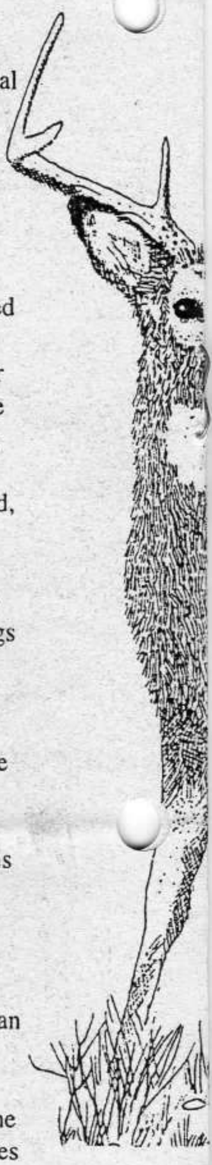
The TFF lies within deer management unit 29A, which is a 257 square mile area managed for an over-winter goal of 10 deer per square mile of deer habitat. Over-winter goals are determined by the amount of quality of available deer habitat in relationship to the productive potential of the herd. Fall harvest quotas are determined by the reproductive potential of the herd in relationship to the over-winter goal. Due to the two previous hard winters, a 20% reduction in antlerless harvest is being planned by issuing fewer antlerless tags in unit 29A this fall.

The TFF provides some excellent summer range for deer with abundant aspen stands of various ages and many grassy openings scattered within its uplands. Aspen leaves are the main food of deer in the summer and grasses are an important spring and fall food. Grass openings are also an important component of fawn nursery areas.

In late fall, white-tailed deer migrate to winter range which consists of lowland conifer composed of cedar, fir, pine, and hemlock. These conifer areas provide thermal cover and reduced snow depths. By protecting deer from wind, the temperature can be several degrees warmer. The TFF has several of these areas. A few are located on Big Island, around Reimer Lake, and below the Flowage Dam.



An often-asked question concerning deer survival in winter is whether supplemental winter feeding will help the herd. A number of TFF residents feed deer both recreationally and as a good Samaritan gesture during severe months.



In truth DNR doesn't feed simply because feeding does little to help the regional deer herd survive. This is because most of the herd (as much as 70%) is inaccessible to feeding. If you intend to feed, you must do it right or don't do it at all. If done improperly, you can do more harm than good. A few things to consider would be to start early and keep feeding until May 1. Feed at a rate of 2 pounds per deer per day. The best feeds are mixes of corn, alfalfa, oats, soybeans, molasses, and several vitamins and minerals. Next best is oats and corn. The least desirable feed is hay. The fiber in some hay cannot be readily broken down which can negatively impact deer.

Mark Twain once said, "Weather is a subject everyone discusses but nobody ever does anything about." Clearly, we can't control the effects of weather on deer. On the contrary, it's the weather that controls the deer. All we can do is provide good summer and winter range through our land management practices, reduce deer numbers in the fall through hunting to a level where they will survive most average winters, and leave the rest up to nature.

One old wildlife manager coined it well when he told me managing deer is a three-fold formula. Give 'em grass in the summer, lead in the fall, and pray in the winter. I'm praying next winter will be a mild one. ❖

Fisheries Notes

by Jeff Roth, Fisheries Biologist

Beginning at ice-out this spring, the Department of Natural Resources launched its fourth comprehensive fish population survey on the Flambeau Flowage and Trude Lake.

The primary purpose of the survey is to determine adult walleye population densities so safe harvest limits can be established. We have also expanded the data collection to address a number of other issues where current data is limited.

Regulations

Special regulations that are tailored to a particular body of water are one of the most useful tools available to fisheries management.

In 1992, the 40" minimum length limit was established for musky on the Flowage and Trude Lake. We will be evaluating the effectiveness of this regulation and attempting to estimate the adult population of musky during 1997 and 1998 and compare this data to previous surveys. Several netting crews will be sampling during early May, 1997, and clipping a dorsal fin section. A duplicate effort in 1998 will produce a mark/recapture population estimate for the adult fish. Spring sampling during the spawning period is the only time adult fish are vulnerable to capture in the numbers necessary to calculate a reliable estimate. Information on critical musky spawning areas and the status of the northern pike population will also be gained through this survey.

There has been a "no minimum" length regulation on walleye for over 25 years. During that time, fishing technology has improved, angler attitudes have changed and further stresses on the species have developed. This survey will provide insight as to whether the fishery can continue to thrive under this management or if a different regulation or management approach is more appropriate.

The smallmouth bass regulation of 15" and 2-bag limit will be evaluated during 1997. Sampling by electro-fishing during the bass spawning period will provide information on the status of this fishery. To date, this regulation appears to be working well.

Stocking

The fish population in the Flowage has a history of being self-sustaining without the need for supplemental stocking for most species. During the past 30 years, the only species which have been stocked are muskellunge and lake sturgeon. Lake sturgeon will continue to be stocked every few years in the Lake of the Falls area and the Manitowish River. Because sturgeon are especially slow in maturing (20 years), any evaluation of our stocking program will be several years down the road.

Past survey data indicated successful musky reproduction was inadequate to sustain the fishery. Therefore, musky are stocked annually with a quota of 2500 fingerlings which average twelve inches in length. This year, the stocking quotas are canceled to facilitate evaluation of natural recruitment. Fall sampling will determine how many young of the year are present and whether the stocking program is adequate or necessary.

Water Quality

Low dissolved oxygen has plagued portions of the Flowage over the past two winters. During the spring of 1996, evidence of a winterkill was discovered in the Horseshoe area. This past winter, oxygen readings suggest another winterkill is likely. These conditions are undoubtedly the result of the severe winters and the lower over-winter water levels we have experienced. This years' survey will evaluate the magnitude of these kills and the impacts on that discrete stock of walleye that spawn in the Horseshoe area of the Flowage.

Conclusions

Findings from the 1997 survey should provide some vital information on the state of the fish population and fishery. As part of the 1997 fisheries survey, a creel census will be conducted to gather information on fishing pressure, catch and harvest rates and angler demographics. The benefit of having past survey data from 1975, 1989, and 1992, will be a great aid in examining how the fishery has developed through time while providing a solid basis for future management direction for the Flowage. ❖

✘ *March - April* — The melting snow and spring rains make water plentiful so the Flowage can again store water and is filled by May 1 to start the cycle over again.

FERC licensing

The Federal Energy Regulatory Commissions (FERC) made a determination this spring that they will require a federal license for the Turtle-Flambeau dam. Chippewa and Flambeau Improvement Company is currently contesting this decision, but if the decision stands it will mean a new look at all aspects of dam operation including water levels and drawdowns.

The FERC licensing process occurs in three stages over about 5 years. The DNR serves only an advisory role to FERC who will ultimately decide what conditions the license would place on future operation of the dam. FERC invites public participation in all stages of the application process.

- In the first stage, the applicant compiles information from existing sources and new studies. From this information the significant resources issues are identified.

- The second stage involves preparation of a draft and final application for license. Using information learned in the first stage and in consultation with resource agencies, the applicant includes plans to mitigate the adverse impacts of dam operation and plans to protect fish, wildlife, and recreational use of the waterway.

- In the third stage, FERC completes an environmental analysis and balances between competing uses of the waterway. This includes giving consideration to economic benefits such as hydroelectric power production. The process ends with a license order which will establish how the dam will be operated for the next 30 to 50 years.

The Turtle-Flambeau Property Owners' Association will be kept informed of the process so that members can get involved and provide input. ❖

Annual meeting notice

The second annual meeting of the Turtle-Flambeau Flowage - Trude Lake Landowners' Association will be held as follows:

Date: Saturday, June 14, 1997
Place: W. S. Carow Park Pavilion
.8 mile east of Mercer on
County Trunk J
Time: 1:30pm

Agenda

1. Call to order
2. Secretary's Report
3. Treasurer's Report
4. Board of Directors Report
5. Committee Reports
6. Election — officers and board nominees
    a. Secretary: James Leefer
    b. Treasurer: Roger Belongia
    c. 2 at-large directors
        1) Jeff Wilson
        2) William Nadler
7. Old Business
    a. Incorporation
    b. Tax Status
    c. Other
8. New Business
    a. Purple Loosestrife Project
    b. Lake Water Quality Program
    c. Other

Program

1. Roger Jasinski, DNR, project manager for our lake
2. Jeff Roth, DNR, fish manager
3. Bruce Bacon, DNR, wildlife manager

Wisconsin Lakes Convention

by Maryann Brown

The Lakes Association Conference that was held in Stevens Point had around 650 people in attendance. The theme was "An Uncertain Inheritance, The History and Implications of Humans on Wisconsin Lakes."

Some of the subjects that were discussed were:

- The Impacts of Development
- Measuring Impacts
- What Can be Done

The information that I received helped to reinforce the need to protect our lakes from pollution and heavy development. Many of the lakes south of Highway 29 are experiencing many difficulties. The zoning of undeveloped land in our area needs to be updated and implemented with the information that has been gathered from various lakes that didn't heed the warning of overdevelopment.

Many of the people at the Conference could not give enough warning about the trend that is coming our way. The homes are getting bigger and the lakes are being used by many different interest groups.

Without proper zoning requirements and guidelines, we too stand a chance of falling into the sad state that so many lakes are already experiencing. Lake associations are definitely the watch dogs of our beautiful lakes and we can make a difference. We can direct the way that we envision our lakes to be in the years ahead. ❖

Waterfowl Nest Boxes

by Jeff Wilson

The TFF waterfowl nest box survey was conducted this past March. Survey results were similar to other years with hooded mergansers as the most common waterfowl user occupying 21% of the boxes with 50% of the boxes used by some species of wildlife. Survey results are as follows:

1997 Usage

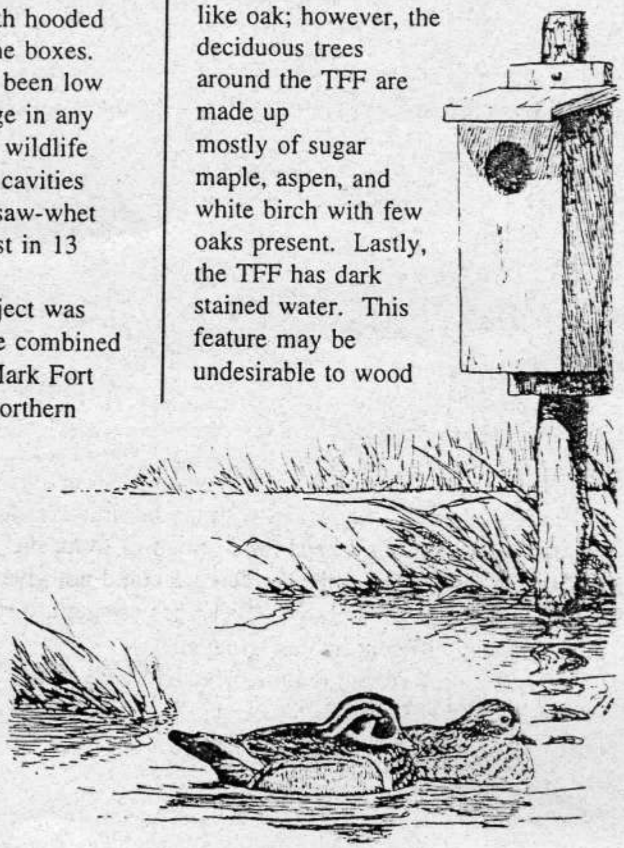
Hooded Merganser	21%
Wood Duck	0%
Grackle	16%
Starling	1%
Tree Swallow	3%
Squirrel	1%
Damaged/lost	7%
Unused box	50%

This annual survey has been conducted each year since 1985. The survey involves checking each waterfowl nest box, evaluating its usage by wildlife, and replacing the nesting materials (wood chips) and doing minor repairs, if needed.

Past records show 1993 was the highest duck usage year with hooded mergansers using 41% of the boxes. Wood duck use has always been low with 1% as the highest usage in any one year. Other occasional wildlife users of these artificial tree cavities include American kestrels, saw-whet owls, golden ducks (one nest in 13 years), mice, and bees.

The TFF nest box project was initiated in 1984 through the combined efforts of John Olson and Mark Fort and funding by DNR and Northern States Power Company. Over 200 boxes were erected on pipe over water in selected areas of the flowage that provided quality brood habitat. Pipe was used as a deterrent for raccoon predation and placement over water reduced red squirrel occupancy. The intention of the project was to attract and increase wood duck production by providing additional cavity nesting space. It was assumed the absence of natural nesting cavities in existing trees was a limiting factor for wood ducks on the TFF.

After 13 years of data collection, this has not been found to be the case. The most wood ducks ever found nesting in a given year were two pair, yet we always found that between 25% to 50% of the boxes were unused. There are several other theories as to why woodducks rarely nest on the TFF. One is that the TFF is located too far north. Mead Wildlife Area, 100 miles south, near Wausau, has abundant wood duck nesting as well as abundant hooded merganser nesting. The TFF is in the middle of a hooded merganser nesting range but on the northern edge of wood duck nesting range. Another theory is wood ducks are known as a hardwood forest species. It could be that the TFF has too much of a conifer component on its shoreline making it unattractive to wood ducks. Wood ducks like oak; however, the deciduous trees around the TFF are made up mostly of sugar maple, aspen, and white birch with few oaks present. Lastly, the TFF has dark stained water. This feature may be undesirable to wood ducks for feeding habitat. Wood ducks are abundant during spring and fall migration so they do visit the TFF seasonally.



The TFF nest boxes have been surveyed for 13 years. Besides DNR and NSP monitoring the boxes, volunteer assistance has been given by Iron County Wisconsin Conservation Corp (WCC), Minocqua Boy Scout Troop 564, Dead Horse Lodge Resort, as well as local citizens. Many of the boxes were donated by Bob Dralle, a local landowner and member of Wausau Chapter of Wisconsin Waterfowl Association, Inc.

With DNR ownership and implementation of the TFF Master Plan, artificial nest boxes will be gradually phased out. Every year, a few poles are bent or damaged by ice. As the boxes and poles deteriorate over time, they will be removed. The phasing out is an effort to comply with the goal of managing the TFF in a more natural and wild setting. The shoreline and adjoining uplands are being managed for old growth, which will provide natural cavities for wildlife in the future. ❖

Association Dues

The board of directors determined that dues would be due at the annual meeting on June 14. Therefore, dues of $15.00 per family or entity are due and payable at the annual meeting. Dues are also payable by mailing a check payable to:

Turtle Flambeau - Trude Lake Property Owners' Association, Inc.

P.O. Box 631
Mercer, WI 54547

TURTLE FLAMBEAU - TRUDE LAKE
PROPERTY OWNERS' ASSOCIATION, INC.
P.O. Box 631
Mercer, WI 54547

James and Valerie Leever
1454 Ashland, #604
Des Plaines, IL 60016

LEEV454 1600162027 1597 05/14/97
LEEVER
HC 2 BOX 292A
PARK FALLS WI 54552-9408
ST 13

Calendar of Events

June 14 — Second Annual Association Meeting, Saturday, June 14, 1997, 1:30pm, at W.S. Carow Park Pavillion, .8 mile east of Mercer on County Trunk J.

June 13-15 — Voyageur Inn Rendezvous Institute, Mercer. For information call 715-476-3522.

July 4 — Celebration in Mercer. For information call 715-476-2330.

July 9 — Association Program on Flowage Management, 1:00pm, Springstead Landing. Rain or shine. DNR representatives will "show and tell" us about the state management program for the flowage and the state-owned lands in the project. For information call Roger Belongia at 715-583-4410.

July 31 — Turtle-Flambeau Flowage Pontoon Boat Tour, For information call 715-476-2389.

July 27 through August 11 — Mercer Historical Society Open House. For information call 715-476-2389.

August 2-3 — Grand Portage Rendezvous, Mercer. For information call 715-476-2121.

August 3 — Mercer Lions Chicken BBQ, Mercer. For information call 715-476-2513.

August 6 — Loon Day, Mercer. For information call 715-476-2389.

August 9 — Town of Sherman Fire Department Corn Roast, Springstead. For information call 715-583-9979.

August 17 — Pig Roast at Cedar Lodge, Lake Bastiane. For information call 715-476-2511.

September 27 — Association Pot Luck on Hot Dog Island. For information call Lloyd Bowlus at 583-2240.

Questionnaire Results

Following are the results of the Turtle Flambeau - Trude Lake Property Owners' Association, Inc., Questionnaire. The information was compiled by Jim Leever, Association Secretary, and condensed to fit the space available in this newsletter. The response to the questionnaire was poor, we were hoping for more input from the members. — *Ed.*

When asked what you would like the Association to do for you, the response was: help to keep and protect the status quo and work with DNR to protect and improve walleye fishing.

When asked what you would like to see changed or stay the same, the response was again, to keep the Flowage as is and limit further development, improve fishing, and control or prohibit water skis and personal water craft.

When asked why you own property on the Flowage, the response was for tranquility, peace, relaxation, a retreat, "last wilderness."

When asked how you use the Flowage, the response was overwhelmingly for fishing, with mention of other restful activities like relaxing, sightseeing, or leisurely boat rides.

Concerns were expressed over change caused by over-use, fluctuations in water level, and by the affect of high powered boats, water skis and personal water craft.

Again, the small number of responses limits the value of any conclusions drawn directly from the data. For that reason, the results are very general. No attempt was made to derive proportions for any attributes that may be of interest. However, the responses provide a profile of the desires and concerns of Flowage and Trude Lake residents, and a guide for action and improvements. ❖