

JESSIE LAKE WATERSHED ASSOCIATION



JESSIE JABBER

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GREETINGS FROM PRESIDENT HAROLD GOETZMAN:

As we look forward to the start of a new year for the Jessie Lake Watershed Association (JLWA), I find myself still writing this letter from the presidency. After five years in this position I thought perhaps it would best serve the organization to have a new president? However, since no one else volunteered I have agreed to remain as president and hope that we will continue to have success in doing what is best for our members and the watershed. The continued growth in membership and your supportive comments have made it a rewarding experience. Support from the people at the Department of Natural Resources (DNR), Soil and Water Conservation District (SWCD), U. S. Forest Service (USFS) and the Minnesota Pollution Control Agency (MPCA) has been wonderful and as in past years I have been blessed with a great group of officers and directors. I am grateful to them and to Jim Anderson for all his help as our Vice President. Jim will continue to share his talents as he moves to a director's position. I look forward to working with Bill Nichols as the new Vice President and our new director, Jim DeConcini.

My concern for our association is where do we go from here and what do we hope to achieve? What motivates or inspires one to continue with these efforts? I guess for me, the motivation comes from a sincere love for our Jessie Lake area and all it has meant in my life for the past 25 years. I am sure most of you share those same kinds of sentiments as I have heard many people say how much they love being on the lake. It can probably be best said in the words of my favorite outdoors writer and conservationist Sigurd Olson, "Without a love of the land, conservation lacks meaning or purpose, for only in a deep and inherent feeling for the land can there be dedication in preserving it. What we are trying to preserve is not scenery as much as the human spirit." Perhaps the best way to honor Sig Olson and his legacy is through our own commitment to protect our valuable resources. That said, it is time to continue our efforts to protect and preserve the JLW for our children and grandchildren.

Someone once told me, we don't manage resources, we manage human behavior. The resources will take care of themselves just fine. It's the human influence we interject on the resource that causes the problem. I think, however, that we often do not know or are not aware of what our impact is on the natural resources and only when we look back as we have in our recent studies do we make that assessment. Unfortunately, we don't have the luxury to start over and do it the right way nor do we have any control over the way nature continues to age our lakes. My management philosophy for the Watershed Association is to provide the education and information that will allow each individual to manage their own area in a responsible manner. Hopefully, we will have that chance as we proceed with the next phase in finding a way to maintain our lakes as the place we use to revitalize our emotional and spiritual well being.

I hope you have a great Holiday Season and a very prosperous New Year filled with good health and happiness! Wherever you spend the winter, just remember - the ice will be gone come next spring.

ANNUAL MEETING

After calling the meeting to order, President Harold Goetzman introduced the Association officers and directors and asked any new attendees to stand and be recognized before the 42 people attending the meeting.

Bill Nelson read the minutes of the last meeting and Neil Gustafson handed out a summary of the financial status of the Association that showed a balance of \$2,349.75.

Jim Anderson reported that of the 142 property owners in the watershed, 88 are members.

Harold reported that the DNR stocked 1.8 million walleye fry in Jessie Lake this spring.

Jim Anderson recently conducted his annual loon survey on Jessie Lake and observed 9 adults and 1 young.

Bill Nelson reported that the water level of Jessie Lake is presently 1324.6-feet above mean sea level, which is similar to the long-term average level. On July 11 the water level reached 1326.4 or 31-inches higher than the level observed three weeks earlier, and 6-inches lower than the all time highest level recorded in 1999.

Harold asked the members to check our web site and let him know if they have any comments or changes for improving our site.

Harold briefly reviewed the status of our Phase I Clean Water Partnership Grant. The Paleolimnology study indicated that Jessie Lake has always been relatively productive. Other studies indicate the primary source of phosphorus in the lake is from recycling from the bottom sediments rather than from septic tanks or runoff from the watershed. We expect to apply for a Phase II grant that will include funds for additional sediment sampling and low cost loans for new septic tanks, shoreline plantings and riprapping. People interested in these programs should contact Harold.

Harold mentioned we should clean debris from Spring Creek this fall and asked those interested in helping to contact him.

The DNR has obtained funding for us to construct two more walleye spawning beds in Spring Creek. Assuming we can obtain the approval of the USFS we will do that this fall.

Itasca County has been in a lengthy process of developing a new zoning ordinance. Because of controversy over the extent of protection for lakes and streams the county commissioners recently voted to start over. Harold stressed the importance of those voting in this area for the county commissioner since the incumbent will have a major impact on any zoning ordinance finally approved.

Harold also showed the audience purple loosestrife and asked them to eradicate this exotic plant if it appears on their property. Plants observed in the water or roadside should be reported.

Harold stated Gloria Dallas has consented to run again for a director's position and Jim DeConcini has volunteered to run for the vacant director's position Jim Anderson decided not to continue as vice-president but is willing to serve as a director; Bill Nichols consented to run for the position of vice-president. The attendees unanimously approved this slate of officers.

Gary Lees won the door prize, a baseball cap with Jessie Lake Watershed Association on it that was donated by Sarah Nelson. Raffle tickets were sold at \$1 apiece or 6 for \$5. The donors of the prizes and the winners were: canoe paddles painted by Bob Lewis were won by Loretta Eggers and Jean Gustafson; sweatshirt and polo shirt donated by Jessie View Resort and Campground were won by Bev Novak and Duane Thorson; bath towels donated by Three Cedars Resort were won by Gail Zerban and Tim Onraet; a T-shirt and baseball cap donated by Aspen Springs Resort were won by Diane Goetzman and Bill Nelson. Thanks to these donations \$120 was raised for the JLWA.

After the meeting the attendees enjoyed a potluck. Harold urged the members to thank Randy Harju, owner of the Bowstring Store, who donated the hot dogs, buns, and utensils for the lunch.

MEET YOUR NEW DIRECTOR

Jim DeConcini. I'm single (divorced), with two grown children and grandchildren. I earned a B.A. from the U. of M. in 1975 with a major in Criminal Justice and in 1990 a M.Ed. in Adult Education from that same school. I worked for the Minneapolis Police Department. from 1968-98, spending my last 12 years as a detective-sergeant in the homicide unit. I worked part-time from 1980-90 as an instructor at the Minneapolis Community College teaching law enforcement courses. When I retired in 1998, I sold my house in Minneapolis and moved to Jessie Lake. I am at Jessie Lake from early May until the end of October. I spend the winter in Arizona, Mexico, and Costa Rica. I like to fish, golf, read, and play poker. I also enjoy volunteering as an English as a Second Language teacher when I'm in Arizona.

CLEAN WATER PARTNERSHIP UPDATE

The severe algal blooms Jessie Lake exhibited in some summers stimulated the JLWA to apply for, and receive, a grant from the DNR to monitor the water quality in Jessie Lake and the other lakes in the watershed. Following sampling in 1998-99 under this DNR grant, funding was obtained for an additional two-year study under a Phase I, or diagnostic, MPCA Clean Water Partnership grant.

Phase I Summary

Thanks to the hard work of Noel Griese (SWCD), Art Norton (SWCD), Brenda Stauffer (USFS), and Bruce Wilson (MPCA) the results of both these studies have been compiled into a 300-page document. Studies conducted on Peterson, Spring, and Little Spring lakes identified no significant changes or problems in water quality. Data collected on Jessie Lake indicated the phosphorus levels were very high in 1998 at 59 parts per billion (ppb) and then declined to an average of 33 ppb in 1999 through 2001. A 1986 study that measured 26 ppb of phosphorus in Jessie Lake would indicate just 15 years ago there was about 25 to 50 % less phosphorus than the levels found now. The annual water and phosphorus balances calculated for Jessie Lake and studies conducted by researchers from the University of Minnesota (UofM) indicated the primary source of the phosphorus was from the bottom sediments and secondarily from septic tanks and runoff. The bottom sediments of Jessie Lake contain insufficient amounts of aluminum and iron, metals that normally bind with phosphorus so that the phosphorus cannot be used by algae. This lack of aluminum and iron in the sediments allows phosphorus to be recycled from the bottom sediments during the summer when oxygen is depleted in the deep water and strong winds mix the lake water. If the trend continues for climatic warming in future years, lakes such as Jessie may experience greater recycling of phosphorus from the bottom sediments.

Management goals to maintain the mean annual summer phosphorus concentration below 40 ppb in watershed streams and 30 ppb in Jessie Lake were established. Attaining these goals requires reducing the primary source of phosphorus – recycling from the lake's bottom sediments and minimizing watershed nutrient and sediment input to Jessie Lake. Chemical treatment of bottom sediments to reduce this recycling has been done on smaller lakes but would require the prohibitive sum of \$400,000 to \$800,000+ to treat a lake the size of Jessie. However, based on the UofM study, the recycling of phosphorus from the bottom sediments appears to have been detected at an early stage. A model of this phosphorus recycling developed by the UofM researchers suggests that lake management goals can be achieved by relatively small reductions in phosphorus levels and would result in significant increases in water quality. Unfortunately, in the future we can expect more years of severe algal blooms similar to what occurred in 1998, a long, warm, summer with low water levels, unless we reduce the external (septic tanks and runoff) and the internal (sediment) inputs of phosphorus.

In summary, the results of this study indicated the water quality of Peterson, Spring, and Little Spring lakes was typical for these types of lakes and that Jessie Lake: 1) is extremely sensitive from a

nutrient-eutrophication perspective; 2) has received a succession of cumulative impacts from logging, agricultural, and development stages; 3) has significant, and increasing, internal phosphorus loading recycled from its sediments; and (4) can be significantly improved over time, by small reductions in external and internal phosphorus sources.

Phase II Application

It was agreed amongst the governmental partners of JLWA that we apply to the MPCA for a CWP Phase II grant to implement the management plan. Included in the application submitted, was funding for low-interest loans for property owners to upgrade their septic systems, and implement shoreline stabilization, and re-vegetation projects. Additional corrective actions proposed were aimed at reducing external phosphorus input through stream stabilization and stream road crossing improvement, and implementation of shoreland and forestry best management practices. In addition, the UofM researchers would continue to develop and assess cost-effective methods to treat the phosphorus in the bottom sediments. For this purpose, it was proposed that the UofM evaluate the use of locally available clays and taconite related materials for augmenting Jessie Lake’s aluminum and iron content in the sediments. Partial lake chemical treatments (e.g. alum) would also be evaluated as a potential method to slow the release of phosphorus from the sediments.

The JLWA portion of this application, which requested \$216,000 for a two-year period, totaled \$24,800, of which \$21,400 was in-kind contribution of volunteer labor. The application was submitted on Nov. 11 and a decision by the MPCA is expected late this winter.

ECONOMIC IMPACT OF JESSIE LAKE WATERSHED

By Harold Goetzman

The recent decision by the Itasca County Commissioners to delay developing a new county zoning ordinance was caused by disagreements over the extent of protection our aquatic resources require. Therefore, I thought it would be of interest to look at the economic significance of lake property in our Jessie Lake Watershed (JLW). The shoreland owners recognize values and are willing to purchase land for relatively high prices, pay high real estate taxes, and drive many miles seasonally to reside in a shoreland environment. Vacationers and tourists also spend large amounts of money while enjoying our lakes.

An estimate was made to determine the total economic significance of the four lakes in the Jessie Lake Watershed using the current property values and a method developed for calculating the local economic impact. According to the Itasca County Assessor’s Office the total market value of property on the four lakes for the 2002 tax year was \$12,119,300. The details of this total are shown in

the following table for seasonal, permanent residential and resort properties:

Lake	Total Market Value - \$		
	Seasonal	Residential	Resort
Jessie	5,971,500	4,223,100	682,500
Peterson	828,500	128,300	
Spring	13,300	158,900	
L. Spring	113,200		
TOTAL	6,926,800	4,510,300	682,500

The net result is about \$125,000 in property taxes were paid to Itasca County by the JLW shoreland owners to support the County, townships, and school district. Starting this year a new state property tax law requires that no local school tax be collected on seasonal recreational property, including cabins. However, a new state property tax (in addition to county and township) on seasonal properties

will go into the state general fund, where some of the money is designated for funding education. It is interesting to note about 80% of the property taxes (63% of the value) were paid by the 73% non-homestead owners who have no vote in county elections.

The 1994 Minnesota Lake and Watershed Data Collection Manual provides information on determining economic impacts of lakes with a method for estimating the many sources of income that are derived from lakes. The surface area of fishable lakes in the watershed is a major factor in this method and the two lakes with public access (Peterson and Jessie) were used for the calculation. Monies spent on retail and service industries associated with lakes are included such as resorts, restaurants, food, bait and sports shops, apparel, vehicles, gasoline, boat sales and service, docks, cabin/homes and services, recreational activities and license fees. The estimated economic impact of direct and indirect monies spent is over \$2.82 million per year. In addition, a total value-added amount of \$1.26 million per year was calculated, which includes the gross output of wages and other expenses. A total direct and indirect impact on employment indicated 31 jobs have resulted due to our watershed lakes. Thus, the overall economic impact of the Jessie Lake Watershed to Itasca County is quite significant.

For comparison, a study our neighbors in the Turtle Lake Watershed conducted shows they had \$33,096,500 property value and paid \$333,348 in property taxes. In addition, they have an economic impact of over \$7 million per year compared to our \$4 million. One can certainly see that the overall economic impact of our Itasca County lakes is very large and that does not attach any value for the actual recreational enjoyment we all get from these natural resources. Decision-makers of the future need to realize that lake resources are an important part of the long-term economic vitality and stability of the area. Water quality and the fishery quality are known to have a direct impact on the value of shoreland property. While lakes can be degraded over a short period of time, there are very limited public resources available to help rehabilitate them. The high cost of lake restoration in comparison to protection is well known so we must continue to be good stewards of the environment and government officials must be elected that will help us protect these valuable resources.

RAVENOUS RODENTS¹

By Neil Gustafson

Since the last glaciation about 10,000 years ago, beavers have been the dominant landscapers in the Jessie Lake Watershed. They have shaped the environment by cutting down trees and impounding water. These construction engineers have built dams on virtually every small stream to slow the flow of water and flood low-lying areas. This has increased the rate of sedimentation, added nutrients and organic matter, altered the types of vegetation and created habitat for other wildlife and insects. Such alterations to the landscape might remain for hundreds or even thousands of years. Fertile land now pastured, mowed, or cultivated might once have been the bottom of a beaver pond.

Beavers are the largest rodents in the northern hemisphere, second only in size to the capybara of South America. Adult beavers might weigh up to 60 pounds; the largest recorded being over 100. They are about 30 inches long, with the hallmark flat tail adding another 12 to 16 inches. Scientists estimate that as many as ten different species of beaver may have existed in prehistoric times. Of those, only two species remain: *Castor Canadensis*, the North American variety, and *Castor Fiber*, the Eurasian variety. The fossilized remains of giant beavers (*Castoroides Ohioensis*) weighing as much as 500 pounds, the size of a large black bear, have been unearthed in Minnesota. A changing climate, food availability and diseases are believed to have brought their demise concurrent with the last glaciation. Estimates of the number of beaver in North America before European intrusion range from 60 million by naturalist, Ernest Thompson Seton, to several times higher by others. Beaver occupied aquatic habitats from the valleys of Northern Mexico to the limits of forestation near the Arctic Circle.

The Great Lakes Area is considered to be the heart of beaver range in North America, and the headwaters of the Mississippi and Big Fork Rivers (including the JLW), with their immature drainage patterns of many shallow slow moving streams, one of the world's prime beaver habitats. Before trappers arrived, beaver occupied virtually every pond, lake and stream in central Itasca County. With an abundant supply of food and building materials, it is estimated that beaver density in this area might have reached eight colonies per square mile, with four to eight beaver per colony. Intensive trapping to meet the demand for pelts brought the beaver to the brink of extinction by about mid - nineteenth century. Millions of beaver pelts had been shipped to Europe to adorn the privileged gentlemen, nobility and clergy with capes and hats made of beaver fur.

¹ To obtain the sources of the material for this article contact Neil.

Beavers are best known for their industrious nature and compulsion to cut down trees. Tree cutting serves two purposes, providing both food and building materials for dams and lodges. Among tree types, aspen serves both purposes best, but other hardwoods are used when aspen is not available. Beavers have powerful jaws and large orange colored "buck" teeth that allow them to cut through the toughest woody material. As with other rodents, their front teeth continue to grow throughout their lifetime and are kept sharp with use. If their teeth are not used they will grow inward in a curved fashion so that eventually the beaver would be unable to continue their forestry projects. Beaver have a complementary set of large molars to grind and help digest the bulky plant material.

Beavers prefer small trees, up to about four inches in diameter, but larger trees are used when the supply of smaller trees has been exhausted. Beaver prefer trees near their pond, but may travel more than 100 yards overland to secure the preferred small aspen. Small trees and branches are hauled to the pond by carrying the butt end in their mouths. Larger diameter branches may be cut into three or four-foot lengths for easier transport. Around their pond, there may be well-worn paths from repeated dragging of small trees, branches and limbs. To down a large tree, a beaver usually works alone at night, sitting upright on its large flat tail, biting downward with its top incisors and ripping out chips of wood. A beaver can fell a six-inch diameter tree in about 15 minutes, according to wildlife biologist Paul Strong. Trees up to 36 inches in diameter may be a project over several weeks. Once a large tree is on the ground other members of the colony may join in trimming the smaller branches, bark and leaves, which are used for food. After trimming, the large barren trunks are left to deteriorate.

Beavers live in lodges constructed of branches and mud. An underwater entrance to the lodge is made by cutting beneath the pile of branches at an upward angle toward a large air pocket above the water and inside the structure. The main chamber is typically about two feet high and five feet wide. Once the superstructure of branches and sticks is in place, mud is carried in the forepaws under the chin, the beaver walking upright. A small unplastered area is left in the top of the lodge for an air supply. During winter the mud freezes and effectively insulates the lodge which is warmed by the bodies of its inhabitants. Bank dens, as distinguished from lodges, are constructed by digging into a mud bank on the edge of a larger river or lake. In some cases beaver moving to a new territory will construct a small bank den as a first residence before a lodge is constructed. These dens are then used as alternate living quarters, a residence for one or two year old bachelors, or as air pockets during winter when beaver must swim under the ice. Bank dens may be used for permanent housing on rivers or lakes where the water level is difficult to manage.

A safe lodge with an adequate air chamber requires a stable water level, so beaver will construct elaborate water control projects to regulate drainage, maintain water levels, and provide underwater transport channels. Damming the flow of moving water is perhaps the strongest instinct a beaver has - after eating and procreating. Wildlife biologists believe it is the sound of running water that spurs a beaver to action. They attempt to still the sound by blocking the water movement in a stream, a spring, a culvert, or a roadside ditch - and that's where they can become a nuisance. Even on wide streams they might attempt to block the flow of water, using boulders up to football size and mid-stream islands to anchor their dams. Beaver dams may be several hundred feet long and up to about twelve feet high.

A winter food cache of edible woody materials is stockpiled near the lodge and accessible under the ice. Beaver eat not only trees, however, but also a wide range of aquatic and terrestrial plants, especially during the summer. These include the sprouts of trees and shrubs, water lilies, sedges, reeds, cattails, and various pondweeds and grasses - especially roots, rhizomes, and tubers. The average amount of aspen needed to sustain an adult beaver is about four and a half pounds a day! Therefore, they can deplete their supply quickly. When the food supply is exhausted the colony may split up and move to new locations, which are usually selected by older females.

In the absence of beavers, it is unlikely that North America would have been explored and settled as soon as it was. Native people had been using beaver pelts to keep warm and provide meat long before Europeans arrived. But once settlers arrived, the European market opened and the fur trade began. These settlers soon ventured into the interior of the continent to acquire beaver pelts and other furs for themselves. The beaver trade reached Minnesota when Radisson and Groseilliers traveled west from Quebec in 1655, returning with \$100,000 worth of furs (a lot of money at that time). As a result of their success, Hudson's Bay Co. was founded in 1670. Verendrye arrived at what is now Grand Portage in 1731, established Fort St. Charles on the Northwest Angle and pioneered the water routes that carried the fur traffic from Northern Minnesota, Manitoba and Saskatchewan to Montreal.

The fur trade was in high gear in Minnesota by 1775. The trading post at Grand Portage was built in 1783 by the Northwest Fur Company, then moved to Fort William twenty years later to avoid border disagreements between the US and Britain. By the early 1800's beaver were declining in number as a result of market demands, competing companies, and an unrestricted harvest. By 1820 the fur brigades were heading west to the Rocky Mountains and the Pacific Coast. The fur trade effectively ended in Minnesota in 1842 with the demise of the American Fur Company. As beaver fur became scarce and costly, the beaver trade dissipated and the French silk hat replaced the "beaver" as the symbol of good taste in headwear. By the time Minnesota became a territory in 1849, with Itasca County established as one of the original nine counties, beaver trapping was about at its lowest point.

The beaver remained unprotected in Minnesota until 1875 when it became unlawful to kill beaver from May through October. In 1909 beaver were totally protected when trapping and killing of beaver was prohibited. Ten years later this regulation was modified to allow the removal of "nuisance" beaver. Meanwhile, with clear-cut logging in Itasca County, the rapidly growing aspen took over, providing abundant food and building material, and the beaver, once again, thrived. In 1919 a limited number of beaver trapping permits were issued - but the beaver population continued to grow. By the 1930's nearly all lake and stream shores were devoid of standing aspen, having been denuded by the ravenous rodents. With abundant food and building materials, protection from trappers, and elimination of their natural predators, including wolves, lynx, mink, and otter, the beaver population proliferated.

Beaver trapping was reinstated in 1938 when the first general season opened for a period of eight days and a limit of eight beaver. In the years that followed, harvesting regulations changed almost annually until 1977. By that time the beaver population had recovered sufficiently to reinstate unlimited harvesting. Beaver trapping continues unrestricted, but requires both a small game license and a trappers license. Most trappers are now part time, hobby, or nuisance trappers, but there are still a few who make a living harvesting beaver.

Over the past 25 years the number of beavers has increased gradually reaching a population of three quarters to one million, according to retired DNR wildlife research biologist Bill Berg. These estimates are based on aerial photography and a sample survey of licensed trappers. About 6 to 12% of the beaver population is harvested each year. Fur buyers in Minnesota carry the pelts to Canada for auction, much as they did in at the peak of fur trading. The typical pelt now brings about fifteen dollars, but higher quality mid-winter pelts might bring twenty to thirty dollars each. Trapping activity varies, depending on market prices.

After the rush for beaver, the timber cruisers and the mining prospectors came to claim a piece of Northern Minnesota's wilderness, followed by loggers, miners, and settlers, each in its own way, extracting and benefiting from the abundant natural resources and helping to build the foundation of the present economy. Thank you, Mr. and Mrs. Beaver!

Just by our presence in this time and place, we have modified the natural environment and altered the balance of nature that has existed here for eons. Now that we are on the scene, supplanting the beaver as the dominant landscaper, we inherit special long-term management responsibilities. In a small way, this is what the JLWA, in cooperation with several other public and private organizations, tries to do with its water quality, shoreland management, walleye spawning, and beaver control programs. Each year we trap beaver, and remove their dams to maintain rocky riffles in Spring Creek so that walleye might find suitable areas for spawning. At the same time we expect that the intelligent, industrious beaver will find other suitable habitats nearby, but they often rebuild the old structures.

Each species of plant, animal, fish and insect has a right to be here - even though we may not understand or appreciate its purposes. It is natural and inevitable that species adapt by struggling and competing with one another for food and space in our finite environment. The result is that in an environment suitable for its development, each species becomes stronger and more enduring. We too, are part of that natural environment, but as the dominant species we have obligations that are not entirely clear. We recognize that our own survival is linked to that of all other participants in this creation. Now we find ourselves trying to balance this complex web of life without an adequate map. Perhaps we need to tread a little lighter, so that we can pass on to our heirs the treasures of this life that we have been so fortunate to enjoy.

POTPOURRI

By Harold Goetzman

Wildlife Watching Update: Last month, a federal survey on outdoor recreation was released, showing that Minnesota ranks second in the nation (after Vermont) for per capita wildlife watchers. Minnesotans are just crazy for watching wildlife, state officials exuded in reaction. They said 2 million Gopher State residents like to watch wildlife, now outnumbering hunters 3 to 1 and even outnumbering anglers.

Well, wildlife watchers of Minnesota, you want wildlife? Have we got wildlife for you! Just wait until you see the millions of little crawly creatures creeping, or make that marching like an army, through our forests and cities in the Northland. We welcome all to come and have a look, so tell your friends and relatives, but remind them to wear shoes. This also may be a bonus year coming up with huge numbers of large, fuzzy, friendly flies that delight in coming right to you so no exhaustive searching is necessary.

An Eagle Tale: In talking to one of our Jessie Lake neighbors, Dan Hertle, I learned that he had a unique wildlife experience in late October. Dan was heading up their driveway on the west side of Jessie Lake and saw something moving in the brush. On closer inspection he saw it was an eagle that was apparently having a problem flying. He contacted the DNR and later the next morning they

managed to catch the bird finding its one wing was damaged. The eagle, estimated to be 2-3 years old, was then transported to Grand Rapids and flown by Mesaba Airlines to the Raptor Center in St. Paul for rehabilitation. There it was found the eagle had been shot with a fine lead-shot so apparently some eager bird-hunter had mistaken it for a grouse. If you know of this hunter please let the authorities know so he/she can be assessed a fine. A reward is being offered for information regarding their identity.

Dan is now working on raising the money (\$1500) needed to pay for the rehab and return of the bird for release in our area, as it was more than likely one of the eagles we see daily on Jessie Lake. He hopes to make it an environmental project with the kids at North School in Spring Lake. Donations and money raised by the kids and the DNR should provide the necessary funds.

Check Your Mosquito Repellent: According to a report in the New England Journal of Medicine some claims for insect repellents such as citronella, lemon, eucalyptus, and Avon's Skin-So-Soft bath oil are overstated. The research report says, "According to the results for DEET-based products: solutions with 24 percent DEET lasted five hours, ones with 20 percent DEET worked four hours, and repellents with 6 to 7 percent DEET lasted two hours. For non-DEET products: eucalyptus ointments lasted two hours, soybean-based repellent worked 1½ hours, plant-derived solutions such as citronella lasted less than 20 minutes, Skin-So-Soft bath oil and bug guard each lasted less than 10 minutes and repellent wristbands provided no protection."

Shoreland Native Plants: Itasca County Soil and Water Conservation District (ISWCD) will conduct its first native plant sale for spring 2003. ISWCD will participate in a program providing a variety of native plants, grasses, sedges, wildflowers, shrubs and trees to private landowners in the county. Emphasis is placed on shoreland plantings where the benefits include aesthetics, increased privacy, and shoreland protection. It can also help to improve water quality by reducing sediment load and nutrient runoff. The deadline for guaranteed orders is Feb. 1, 2003 and orders will be taken until April 1 with the understanding the plants may be sold out. For more information or to request an order form, contact the ICSWCD office on East Highway 2 in Grand Rapids (phone: 218-326-0017).

For JLWA members who have a computer and are interested in learning more on this subject, the Association has two copies on CD of the DNR program *Restore Your Shore*. This is a guide to protecting and restoring the natural beauty of your shoreland that takes you through the process of design and implementation. Learn which plants to use and which to avoid while you create a customized plant list from a database of over 400 plants native to Minnesota. Call Harold Goetzman to arrange getting a copy to use.

Shocking Results: This fall on one cold mid-September night you may have seen a boat with strange lights and a humming noise coming by your Jessie Lake place about 10:00 or 11:00 pm. The slow moving boat in about 3ft of water was the DNR fisheries crew of Karl Koller and Jeff Tilman out making an assessment of how well the stocked walleye fry survived this summer. By shocking and counting the walleye fingerlings, they can estimate their survival by comparing the results to other years where the values have been correlated with gill netting catch data This year the count was 72 per hour, which is higher than the 1996 and 1999 values of 63 and 60 per hour, respectively. Walleye stocked in these years have provided good fishing in the past. Hopefully, this means we will continue to enjoy good fishing for years to come.

DID YOU KNOW?

By Harold Goetzman

- When it comes to lake water quality, protection and prevention are infinitely cheaper than restoration.

- There will be a special election for the District Two County Commissioner. Be sure to check the candidates' views on lakeshore development and protecting our natural resources.
- On January 31, 1938 the post office at Mack (established in 1912 with 100 homesteads) was closed and moved to Ingstad's store at Hayslip's Corner. The community selected the name for the new post office and the *Talmoon* Post Office came into existence.
- One of Jessie Lake's early settlers, Helen Sjolund, recently passed away in Deer River at age 95. Helen came to Jessie Lake from Sweden in 1909. Her nephew, Willard Lind, still lives on the east side of the lake.
- Long-term data show that Minnesota's lakes are ice-covered from two to four fewer weeks than 100 years ago. This means shorter ice fishing and snowmobiling seasons.
- About \$53 million is spent on birdseed each year in Minnesota.
- Conservation officers can shoot domestic dogs caught chasing deer. Even if the dog does not catch a deer, the induced stress can kill the weakened animal later in the winter.
- Spring Lake was called Gerhard Lake in 1903.
- To fertilize without buying fertilizer you can just use lake water to water the lawn. There are lots of nutrients in the shallow water near shore. Pumping water onto your lawn actually helps by filtering out nutrients and returning purer water to the lake.
- Itasca County is the third largest county in Minnesota with 3000 square miles and is almost three times the size of Rhode Island. Wetlands cover over 30% of the area.
- One pound of phosphorus washed into a lake can produce up to 500 pounds of algae growth and a yard extending to the water's edge will put 700 percent more phosphorus into the water than a more natural landscaped yard. Thus, the importance of leaving a buffer zone.
- Mosquitoes live up to 30 days and lay up to 100 eggs per day. There are many varieties of mosquitoes and not all feed on animals. Some like frogs and birds.
- Over 588,000 Minnesotans hunt each year.
- Jessie Lake was stocked with approximately 1.8 million walleye fry during the spring of 2002 by the DNR and will be stocked again next spring. This stocking regime follows the new DNR lake management plan requiring two years of fry stocking followed by two years with no stocking.
- The freeze up of Jessie Lake was on November 15, 2002 only one day later than the earliest day observed since records have been kept.
- Our web site (www.mnlakes.org/Jessie) is updated regularly containing meeting notices and the latest issue of the Jabber. Another copy for your family can be easily downloaded.

CONTRIBUTORS

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MEMBERSHIP

The JLWA presently has 88 paid members. If you have not paid your dues send \$10 to Neil Gustafson, 47521 Tilly Road, Talmoon, MN 56637.