

Kangaroo Lake Priorities

PREAMBLE: Kangaroo Lake consists of 1,123 acres divided by a causeway between a north and south basin. It is a very shallow lake with an average depth of about 6 feet and an extremely small area with a maximum recorded depth of 12 feet.

During recent decades, Kangaroo Lake has been undergoing ecological changes. Beneficial aquatic plants have declined in both density and diversity. The bulrush patches of the lake have deteriorated so that a majority of the remaining patches are located in the protected portions of the lake. Two different types of algae are now becoming prevalent on the shores of the south basin. The lake's water clarity is of concern due to the loss of aquatic plants that normally serve to absorb phosphorus. The lake is moving from a game fish lake to a pan fish lake. Eurasian Water Milfoil has definitely established itself, and the lake has been added to the watch list for Zebra Mussels

Kangaroo Lake is being significantly impacted by the swirling thrust of motors and hull wash which are disturbing the lake bottom and uprooting the shallowly-rooted aquatic plants. The disturbed bottom may then be further disturbed by wind and wave activity. These actions are adversely altering the lake's ability to maintain a healthy homeostasis and support its game fish population. Kangaroo Lake is rapidly losing its fundamental aquatic plants that are the only natural barrier to the Eurasian Water Milfoil.

The Kangaroo Lake Association's priority list and associated projects are designed to allow a coordinated effort to address these challenges.

GOAL: It is a goal of the Kangaroo Lake Association to advocate for the health and welfare of the lake.

--PRIORITY I--

- **PRIORITY I – Eurasian Water Milfoil** patches in Kangaroo Lake appear to be increasing, and this invasive species needs to be addressed as a major threat to the lake.

Removal of the Milfoil would be ideal, especially if replaced with aquatic vegetation that would support a healthy lake environment and growing fish populations.

The practical and immediate necessary step would be to map the current patches of Milfoil. Once this project is completed, we will be in a better position to know if the Milfoil is growing and, if so, at what rate. However, the patch of Milfoil adjacent to the causeway needs to be removed so that it does not invade the north basin.

Projects (by September 2006):

- A) Recognizing that Eurasian Milfoil is a major threat to the lake, develop a mapping of the current Eurasian Milfoil growth areas. Additionally, continue to actively monitor their locations/concentrations.

- **PRIORITY I – Eurasian Water Milfoil - Continued:**
 - B) Establish an “official policy” (action plan) concerning the existing Eurasian Milfoil. Consider experimentation (i.e.: chemical removal / harvest) with the large patch in the middle of the lake, knowing that any eradication option will be expensive. However, waiting will only increase the scope and expense of resolving the problem.
 - C) Obtain DNR guidance to use chemicals and/or individually remove the Milfoil along the causeway to prevent the Milfoil from ‘invading’ the North basin.
 - D) Coordinate with the new Door County Invasive Species Office, requesting its support and direction.
 - E) Actively update the Baileys Harbor and Jacksonport town boards of the increasing scope of the Eurasian Water Milfoil, along with, the potential problems and costs associated with control/harvesting/ eradication of this species.
 - F) As necessary, Petition the Baileys Harbor and Jacksonport town boards for dollars to address the (future) cost to control the Eurasian Water Milfoil.
 - G) Establish an INVASIVE SPECIES AND LAKE HEALTH COMMITTEE to direct/implement these issues.

- **PRIORITY I – Zebra Mussels** control – is another new and another potentially major issue for Kangaroo Lake.
 - Projects** (by July 2006):
 - A) Support current DNR recommendations to lessen the chance that Zebra Mussels will infect Kangaroo Lake.
 - B) Announce the potential presence of Zebra Mussels in Kangaroo Lake and ask lake users to be cautious and inspect their boats prior to launching them in the lake.
 - B) As necessary, petition the Baileys Harbor and Jacksonport town boards for dollars to address the (future) cost to control/eradicate the Zebra Mussels.
 - D) Establish an INVASIVE SPECIES AND LAKE HEALTH COMMITTEE to direct/implement these issues.

- **PRIORITY I -- Aquatic Plants** the reintroduction of aquatic plants is critical to the ecology of Kangaroo Lake, and implementation should begin as soon as motor craft traffic is moved to deeper portions of the lake. Aquatic plants stabilize the lake bottom, create buffers to shoreline erosion, absorb excess phosphorus and, therefore, hold the green algae in check. Aquatic plants are also the only natural barrier to the spread of the Eurasian Water Milfoil, and plants also provide necessary habitat, reproduction areas and food sources for the fish population. The Lake Management Study pointed out that the loss of aquatic plants in the south basin was a critical challenge facing Kangaroo Lake.

➤ **PRIORITY I -- Aquatic Plants – continued:**

Projects (by September 2006):

- A) Obtain DNR blanket approval for the planting of recommended species.
- B) Establish a planting list of aquatic plants and recommended/suggested water depths.
- C) Develop a listing of nurseries from which approved species may be ordered.
- D) Immediately following the moving of motor craft to deeper portions of Kangaroo Lake, encourage neighbors to work together to develop desirable shorelines and aquatic plantings.
- E) Monitor the health and vitality of various species planted at different depths and in different locations.
- H) Establish an AQUATIC PLANT COMMITTEE to direct/implement these issues.

➤ **PRIORITY I – Moving Motor Craft to deeper portions of the lake** – Establish a dialog with the Concerned Group to develop a mutual plan to move motor craft traffic to the deeper portions of Kangaroo Lake. Additionally, establish larger informational signs located closer to the launch sites, highlighting applicable guidelines and a Slow/No-wake Zone map. Failure to accomplish this top priority will make it very difficult to successfully address the reintroduction of the critically-needed, beneficial aquatic plants or to protect the few remaining plants in the south basin. Aquatic plants are the only natural barrier to the spread of the Eurasian Water Milfoil.

Projects (by September 2006):

- A) Moving motor traffic to deeper portions of Kangaroo Lake is absolutely vital for the continued health and vitality of the lake. Since this step is the precursor of all future actions projected in this *Priority Statement* and *Action Plan*, the KLA is charged to negotiate to bring this plan to fruition.
- B) Establish larger signs, located closer to the launch sites, explaining the lake's Slow/No-wake policy and including a Slow/No-wake Zone map.
- C) Rewrite and keep current Kangaroo Lake informational brochures and distribute them at boat landing sites on the lake.
- D) Establish a LAKE ECOLOGY COMMITTEE to implement/direct these above objectives.

--PRIORITY II --

- **PRIORITY II – Shoreline Buffers** – Shoreline buffers reduce shoreline erosion and aid fish habitat in areas near the shore. The lack of shoreline buffers decreases water quality by considerably increasing the input of phosphorus and sediments into the lake. A lack of shoreline buffers also eliminates fish and wildlife habitat and allows rain and snow runoff to carry fertilizers, pet waste and lawn clippings into the lake, where they fuel algae blooms.

Projects:

- A) Encourage the establishment of voluntary “No-mow Zones” in order to create a buffer along the shoreline.
 - B) Encourage the plantings of native vegetation along the shoreline.
 - C) Encourage property owners to review and implement the Third Installment of the KLA’s Educational Series: *Kangaroo Lake Comprehensive Study/Management Plan* – February 2006.
 - D) Establish a SHORELINE PRESERVATION COMMITTEE to implement/direct these objectives.
- **PRIORITY II – Fish stocking** – Given the current status of Kangaroo Lake (advancing Eurasian Milfoil, declining healthy aquatic plants, increasing phosphorus levels) stocking Kangaroo Lake may not be practical at this time.

Projects:

- A) Once motor traffic is moved to the deeper portions of Kangaroo Lake, develop a committee to work with the DNR to determine if there is some species of fish that would lend itself to stocking, given the current environment of Kangaroo Lake.
- B) Once motor traffic is moved to the deeper portions of Kangaroo Lake, seek the enlargement of the current causeway culverts to facilitate fish movement between the north and south basins. It is the position of the Kangaroo Lake Association that prior to motor craft moving to the deeper portions of the lake, it would be unwise and unhealthy for the lake to advocate larger causeway culverts. Larger culverts will facilitate the flow of Eurasian Water Milfoil to the north basin, as certainly will the construction effort.
- C) The current FISH AND FOWL COMMITTEE will direct/implement these issues.

- **PRIORITY II – Cormorants, Geese and Waterfowl:**

Cormorants are a federally protected species. Continue to coordinate and support efforts to address this problem via the agencies that have authority to control this species.

Geese - as land owners choose to plant fewer patches of grass that abut the lake, fewer geese will choose to make that particular ‘grassland’ their habitat. Encourage the plantings of native vegetation along shorelines.

Waterfowl have declined throughout the lake area. This is due to the lack of natural/productive aquatic vegetation and the declining fish population.

➤ **PRIORITY II – Cormorants, Geese and Waterfowl - continued:**

Projects:

- A) Work with the DNR to legislatively address the cormorant infestation problem.
- B) Encourage Kangaroo Lake property owners to interact with established groups and associations addressing the cormorant problem.
- C) Encourage the development of shorelines that are less attractive to geese and encourage leaving more shoreline in its natural state.
- D) Establish a list of appropriate aquatic plants and recommended/suggested planting depths that will attract waterfowl to Kangaroo Lake.
- E) The current FISH AND FOWL COMMITTEE will direct/implement these issues.

--ONGOING PRIORITY --

- **ONGOING PRIORITY – Education and Communication** - The board should strive to reach consensus among all of the lake users that the actions of the association are in the best interest of the lake. Further, without a lake-wide action plan, the problems currently noted in Kangaroo Lake will increase in scope and expense.

Projects:

- A) During calendar year 2006, send the KLA newsletter to all property owners on Kangaroo Lake.
- B) Consider (by board action) mailing the annual meeting notice earlier, by the second week in June.
- C) Continue educational releases and informational updates as they become available or change.
- D) Encourage the ongoing exchange of information between the Northern Door County Lake Associations.
- E) The current EDUCATION AND INFORMATION COMMITTEE will direct/implement these issues.

Kangaroo Lake Association Committees:

Effective June 3, 2006, the following committees shall serve as fully-functioning, standing committees, until modified by the president of the Kangaroo Lake Association.

EXECUTIVE COMMITTEE: Shall consist of the officers of the association and other members, appointed by the president, so the committee totals seven members. The immediate past president shall serve as a member pro-tem.

INVASIVE SPECIES AND LAKE HEALTH COMMITTEE: Responsible for monitoring, mapping and controlling invasive species such as Eurasian Water Milfoil and Zebra Mussels in Kangaroo Lake and for managing the efforts to prevent any future infestation of other invasive species. Liaison with the local Town Boards regarding control/irradiation costs.

AQUATIC PLANT COMMITTEE: Responsible for the reintroduction, restocking and re-colonization of all beneficial aquatic plants. This committee will also be responsible for all test programs, grants and coordination with appropriate DNR and other experts.

LAKE ECOLOGY COMMITTEE: Responsible for the slow/no-wake policies, liaison with the Concerned Group to develop a plan to move motor craft traffic to deeper portions of the lake, water and clarity monitoring, buoy and dam grate maintenance, including the installation and removal of the dam grate.

SHORELINE PRESERVATION COMMITTEE: Responsible for defining and implementing programs which enhance the shoreline ecology of Kangaroo Lake.

FISH & FOWL COMMITTEE: Responsible for working with the DNR to determine the best options to enhance the fish, duck and amphibian populations of Kangaroo Lake. Additionally, this committee will pursue options to address the challenges that cormorants and geese present to the lake.

EDUCATION & INFORMATION COMMITTEE: Responsible for continuing the development and release of educational and informational material concerning Kangaroo Lake. The *KLA Newsletter* and *Website* management will also be part of this committee.

INTERNAL MANAGEMENT COMMITTEE: The association vice president shall chair this committee that is responsible for ensuring that the association's Nominating and Auditing Committee protocols are current. Appointment to this committee will be consistent with current board protocols. This committee will ensure that the association's Constitution and By-laws are current.

SOCIAL COMMITTEE: Responsible for the organization and carrying out of the annual KLA picnic, progressive dinner and all other social activities, promotions and functions.

AFFILIATED ORGANIZATIONS / GOVERNMENT COMMITTEE: Responsible for interactions and communications with all appropriate local and state governmental organizations, DNR, area lake associations, WAL, etc., for the common good of Kangaroo Lake. The association president and immediate past president shall be members of this committee.