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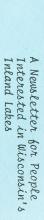
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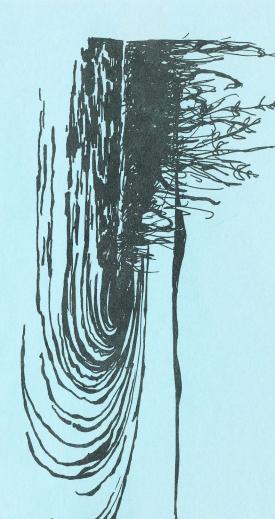


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## IN THE WAKE OF A LOON: IMPORTANT LEGISLATION

As we write this, the Attorney General's opinion has not yet been issued on the voting rights of property owners who do not live in the lake district permanently. (See December issue of <u>Lake Tides</u>.)

However, we have an informal opinion by an Assistant Attorney General; we expect that the formal opinion will indicate the Legislature could not extend the right to vote to second-home property owners without a referendum. (Article III, Section 1 of Wisconsin Constitution) When Chapter 33 was passed six years ago, no referendum was held on the law.

To clarify the situation, Rep. Cal Potter and several colleagues have introduced Assembly Bill 1124. The bill clearly provides that all residents and property owners are permitted to vote at meetings of a lake district. It also provides for a statewide referendum to ratify the legislation.

If Assembly Bill 1124 passes and is signed by the Governor by the end of February, the referendum will be held at the April election. If the bill is passed in March, the referendum will be held at the November election.

The referendum question as contained in Assembly Bill 1124 reads as follows:

Voting in public inland lake protection and rehabilitation districts--Chapter 33 Statutes.

Shall state law be amended to permit persons who own property in a public inland lake protection and rehabilitation district and who are U.S. citizens and 18 years of age or older to vote at meetings of the district?

Chapter 33 clearly provided for residents and property owners to vote on projects. There has been some uncertainty about the rights of property owners whose permanent residence was outside the district to vote on other matters. Virtually all lake districts have adopted by-laws permitting full participation by such property owners. Passage of the bill by the Legislature, signature by the Governor, and ratification by a general referendum will mean the lake districts can continue to operate as they now do. The uncertainty would be eliminated; all residents and property owners whose names were on the tax roll could vote on all matters to come before the district.

If the Legislature fails to pass A.B. 1124, or the Governor vetoes the bill, or the referendum is defeated, the current practice of participation by all property owners would be inhibited.

The Legislature will only be in session for a couple of months.

I may want to contact the legislators from the area where you live and express your views. A copy of Assembly Bill 1124 can be obtained from the Documents Room, Basement, State Capitol.

Sincerely yours,

George Gibson

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Lake Management Specialists

#### **PUBLICATIONS**

A booklet listing over 100 publications available through the Environmental Resources Unit can be obtained by writing us at 1815 University Avenue, Madison, WI 53706.



# Cold Water Survival\*

In the last issue of Lake Tides, I briefly mentioned cold water survival techniques and the availability of Coast Guard literature on this subject. Your responses requesting copies of the Coast Guard booklets indicated considerable interest, so I'm going to deal with the subject further in this Eco Note. In fact, our relatively mild winter and erratic temperatures so far this year makes cold water survival an excellent topic for discussion. Ice fishermen and snow-mobilers run an unusually high risk of getting wet this season.

## Before you Go Out on the Ice . . .

First off, if the local DNR office or police department warns against going out on thin ice, take them at their word and stay inside and read equipment or seed catalogues by the fire. Second, if the ice appears to be safe, dress warm in layers of clothing. Air trapped between long johns, shirt, sweater, and coat will keep you warmer than just wearing one outer garment alone. Besides, you can take off the sweater if temperatures warm up and still be comfortable. One of the layers of clothing should be wool, too. Unlike cotton or down, wool will keep you warm even when wet. And, don't forget to wear a hat; you can lose fifty percent of your body heat from the neck and head area. And, last but not least, wear a PFD (Personnel Flotation Device—a bureaucratic term for a life vest, preferably Coast Guard approved—the kind canoists use doesn't retrict movement and is inconspicuous). If your pride or

hassels from unenlightened friends keeps you from wearing a life vest, then invest in a "float coat." They look like ski jackets, but are 'ined with insulation and flotation material. Your local sporting goods store can probably order one for you from a boating safety supply company. A "float coat" will more than double your survival time in cold water compared to regular PFDs.

#### What to Do If You Fall In . . .

First, stay calm. If you struggle you may inhale water and you will lose the buoyancy of the air trapped in your clothing.

If you are forced into the water, try to enter as slowly as possible.

Consciously control your breathing. The shock of the cold water tends to make you hyperventilate (breathe too often) which can make you pass out.

Try to get as much of your body out of the water as possible since water conducts heat away from your body many times faster than air. Even a capsized boat full of water usually floats.

If you must stay in the water, stay still curled up in the H.E.L.P. position (heat escape lessening posture). It is a fetal-ike position. Pull your knees up, cross your ankles, hug your sides. This protects the high heat loss areas of the sides of the chest and the groin. This procedure assumes you have a PFD to keep your head out of the water.

If there is more than one person in the water, huddle together pressing chest areas together to block cold water flow. If there are children in the water also, huddle with them between adults if you can't get them out of the water onto a boat or other floating object.

If you have no PFD, you will have to tread water. Many people have learned a technique called drownproofing for keeping afloat for long periods with little energy expenditure. This works well in warm water but should not be used in cold water. Since it requires putting the head in the water, it speeds heat loss by as much as eighty-two percent over staying still in a PFD.

Should you swim for shore? This is a difficult decision. Distances over water are deceptive. Even strong swimmers are quickly overcome by hypothermia. Swimming speeds cooling rates. Hypothermia disrupts coordination and robs you of strength. Average swimmers make about 8/10ths of a mile before being overcome. Stay with the boat. It is easier for rescuers to spot you that way. Only swim for shore if it is less than a mile away, you are sure you can make it, you have flotation help, and there is absolutely no other chance of rescue.

## First Aid for Hypothermia Victims

Hypothermia is a medical term for the lowering of body temperature and can result from "exposure" to cold water or air such as occurs when someone falls through the ice. The victim may "freeze to death." Hypothermia is always potentially serious and after first aid, the victim should receive medical attention.

If the victim <u>appears</u> to have drowned, don't be discouraged. The body's response to cold water immersion is to shut-down non-essential circulation to preserve blood flow to the brain, lungs, and heart. This is called "mammalian diving reflex." The victim's body functions may all be greatly depressed with no signs of life evident--cold, blue, no apparent pulse or respiration. Begin resuscitation and external heart massage anyway; there may still be a chance! Cold water near-drowning victims have been known to survive

after more than thirty minutes under water. This article is not the place to detail the techniques of cardio-pulmonary resuscitation, but looklets describing the proper technique are now available from this office, courtesy of the U.S. Coast Guard. Better yet, take instructions from your local American Red Cross Chapter.

In addition to CPR, if needed, the victim must be carefully rewarmed as soon as removed from the water. Treat for shock by positioning him on his back with the feet slightly elevated above the head to help maintain blood flow to the brain. The victim should be wrapped in blankets, particularly the head and trunk.

First aid must be administered carefully to hypothermia sufferers. The aim is to minimize afterdrop. This is a further lowering of the body temperature as the cool blood from the extremities returns to the core once the victim begins to be warmed.

To minimize afterdrop, all recommended rewarming methods add heat to the head and trunk to warm from the core of the body outward. Furthermore, because of the loss of strength and weakened condition of the heart, it is important to handle patients as little and gently s possible. Jostling may cause cardiac arrest. During rescue, do not allow victims to exert themselves. Even helping remove their own clothing can stimulate blood flow and worsen afterdrop.

If the victim is conscious, talking clearly and sensibly, and shivering vigorously, then warm dry clothing and shelter, and hot sugary drinks will probably be sufficient to warm him up. But watch the victim for signs that his condition is deteriorating.

If a victim shows signs of clouded consciousness like slurred speech, suffers muscle spasms, or, worse, is already unconscious,

then aggressive rewarming is necessary. Heat must be donated to such victims. Once hypothermia has progressed beyond vigorous shivering merely wrapping victims in blankets will only keep them cold.

There are several ways to supply additional heat. All make use of the high heat transfer areas of the body—the head, neck and groin where blood vessels pass near the body surface, and sides of the rib cage where little fat insulates the body.

<u>Warm Packs</u>: Apply some form of hot pack to the head, neck, sides of chest and groin area leaving arms and legs free. One way is to use towels, sweatshirts or other cloth warmed with hot water (110°F, 43°C). Periodically rewarm the towels by adding hot water. Be careful not to burn the patient. Test the water temperature with your elbow. Hot water bottles, chemical hot packs, heating pads and other such devices could also be used.

<u>Warm Bath</u>: A fully conscious victim with no other major injuries, unlikely to require breathing assistance or cardiopulmonary resuscitation can be rewarmed in a bathtub. Place the victim's body with the arms and legs kept out of the water in a tub of 110°F water. You could also sit the victim in a shower stall with the warm spray directed at the trunk.

<u>Field Methods</u>: A time-tested field method relies on body heat supplied by the rescuers. Strip the victim and wrap in a sleeping bag or blanket along with one or more rescuers, also naked to allow as much transfer of heat from the rescuers to the victim as possible. Be sure to use a sleeping bag or blanket to trap heat around the persons.

 $\underline{\text{Never}}$  give alcohol to any hypothermia victim. It may relax the blood vessels in legs and arms allowing cool blood to return to the core.

If you would like more information about cold water survival,
I can provide you with references and copies of the Coast Guard
Dooklets mentioned above. Write or call George Gibson, Environmental
Resources Unit, University of Wisconsin-Extension, 1815 University
Avenue, Madison, WI 53706. Phone: (608) 262-1369

\*Much of the material in this article is reproduced from Michigan Sea Grant "Upwellings" Vol. 3(4) 1979. The cooperation of "Up-'dwellings" editors and authors and of the U.S. Coast Guard is greatly appreciated.

#### Services Available for Lake District Annual Meetings

Many districts are beginning to make plans for their annual general meeting. We would like to remind you of film and slide set services which are available to your program agendas.

#### FILMS:

Available for rental from: University of Wisconsin-Extension, Bureau of Audio-Visual Instruction, Box 2093, Madison, WI 53701. Phone (608) 262-1644.

RUNOFF: LAND USE AND WATER QUALITY 21 min. color, BAVI #1765, Rental \$8.50

Shows water runoff problems caused by ground cover disruptions such as logging, strip mining, soil tilling and urban development. Suggests methods to control runoff and raises questions of cost, funding and management control. 1978.

LAKE RENEWAL TECHNIQUES
23 min. color, BAVI #9473, Rental \$7.00

Considers lakes as complex ecosystems. Describes renewal and management techniques considering physical, chemical and biological characteristics unique to each lake. 1974.

SHORELAND DEVELOPMENT--A NEW APPROACH 18 min. color, BAVI #9077, Rental \$6.50

Suggests ways of designing lakeshore developments that preserve water quality and shoreline. Presents a four step process for planning and designing this new type of development. 1973.

RESTORING SMALL FLOWAGES FOR RECREATION--THE MARION MILLPOND STORY 15 min. color, BACI #8394, Rental \$7.50

Shows how a millpond was successfully revived. Presents details of lake renewal and management techniques and outlines the part played by the community. 1972.

<u>LAST RIVER</u> 29 min. color, BAVI #2447, Rental \$11.50

Follows the thoughts of a man and a boy as they canoe down a wild river. Presents views of the wilderness and the effects rivers have on man. (WHA-TV). 1965.

LITTLE PLOVER RIVER PROJECT
27 min. color, BAVI #5676, Rental \$14.00

Shows how geologists and engineers collect and interpret data during a quantitative study of a water resource. (Photographic Media Center), 1963.

WHAT CAN WE DO ABOUT FLOODS?

20 min. color, BAVI #0488, Rental \$6.00

Shows Wisconsin's recurring flood problems in cities and countryside. Develops the idea of flood plain zoning. 1961.

#### SPEAKERS:

Within the confines of schedule conflicts, we are always available to talk to lake districts or communities. We may also be able to recommend available DNR or other University Extension personnel appropriate to your program topics. In either case, considerable advance notice will be appreciated. Phone (608) 262-0020, or write us at the Environmental Resources Unit, 1815 University Avenue, Madison, WI 53706.

Additional materials and slide presentations may also be available at your County Extension Office.

#### ACID RAIN/ACID SNOW

Water pollution flooded across the national consciousness over decade ago. A few years later local air quality problems drifted up to Capitol Hill. Major pieces of legislation were created to deal with these problems.

Now a vigorous hybrid has arisen. Like a storm cloud and the flood that follows it, acid rain begins as air pollution and ends up as water pollution. Efforts to reduce local air pollution by building taller stacks have helped produce an international acid rain problem. (See December issue of <u>Lake Tides</u>.)

Suddenly, this new threat is in the news every day. Some of the horror stories are valid; others are exaggerations. We will be providing two opportunities for you to learn more about the topic and to distinguish the serious concerns from the unrealistic ones. Acid rain cannot be ignored, especially by lake and resort people.

## ACID RAIN IN THE UPPER MIDWEST

This seminar will focus on providing information to resource inagers and leaders of citizen groups. Brochures will be distributed to DNR, Soil Conservation Service and County Planning and Zoning Office employees in February. Let us know if you don't receive one.

#### OUR LAKES IN THE EIGHTIES: ACID RAIN AND OTHER CONCERNS

These conferences will be designed for lake district commissioners; property owners, and interested citizens. The format of the conferences will also include the 5th Annual Workshops for Lake District Commissioners. The conferences will be held at several locations around the state in late spring or summer. More to come on this.