#### HBMI Natural Resources Department

Houlton Band of Maliseet Indians 88 Bell Road Littleton, ME 04730

Phone: 207-532-4273 Fax: 207-532-2660

NON-PROFIT ORG U.S. POSTAGE PAID PERMIT #2 HOULTON ME



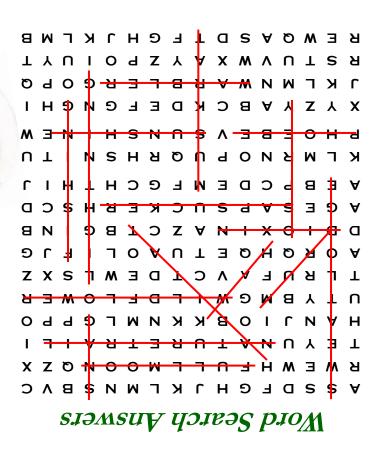
# NAFWS Conference Update

We are continuing to move forward with our plans for the Northeast Regional Native American Fish & Wildlife Society Conference to be held here September 12 - 15, 2004.



We are looking for volunteers to help with the traditional feast that will be held on September 14th, as well as artisans, crafters, drummers, dancers and anyone who would just like to be involved.

If you'd like more information on the conference as the planning evolves or if you would like to get involved, please contact Sharri Venno at 532-4273 ext 215, or Sue Young at 532-4273 ext. 202 or ogs1@maliseets.com



#### **Nipon** (It is Summer)

Brenda Commander - Tribal Chief Susan Young - Editor

This newsletter is printed on Recycled chlorine free paper





#### Inside this issue:

Just Outside the Window	1
Moose in the Road	1
Weather Extremes - Part II	2
Reducing Backyard Burning	3
Meet the Summer Techs	4
Nature Trail Update	4
Word Search Puzzle	4
Understanding GIS	5
Congratulations Ryan	5
Sacred Colors	5
Understanding Stormwater	6
What's in a Gallon of Gas ?	6
Skicinuwatwateneh	6
Who Am I?	6
Protecting Ground Water &	
Your Septic System	7
NAFWS Conference Update	8
The state of the s	J

Enclosures: Understanding Stormwater Danger: Moose Ahead

**TELEPHONE LISTING** (207) 532-4273 1-800-564-8524 (ME)

1-800-545-8524

**ENVIRONMENTAL PLANNING** 

Sharri Venno - ext. 215

**FORESTRY** 

David Lombard - ext 220

**REAL ESTATE** 

Tony Tomah - ext 221

WATER RESOURCES

Dave Joseph - ext 216

Cara Ellis - ext 212

ADMIN. ASST.

Sue Young - ext 202

# **Just Outside the Window**

**HBMI Natural Resources Department** 

Often in our rush to get through the dayto-day grind we lose sight of everything around us. Here at the HBMI administration office we are treated to nature on a daily basis. This is most noticeable in the days of late Spring. As the world warms and the snow recedes, plants, trees and insects come surging back to life. Along with all this activity we mark the return of many migratory birds.



the building,

signaling his

territory and

serenaded daily by a vellow bellied sapsucker as he hammers on the metal guardrail and handicapped signs on



advertising for a mate. Meanwhile, the Eastern Phoebe can be heard with her very emphatic call that sounds just like her name "fee-bee, fee bee, FEE-BEE ". Once again they are nesting just outside the Water Resources office. Also, the Osprey have returned



**Skitkomiq Nutacomit** 

to add to their nest along the river.

Earth Speaker

Unfortunately some people just see the negative sides of the return of the birds

and animals. All they see are the droppings, the nests built in the soffits and eaves of their homes and office buildings.

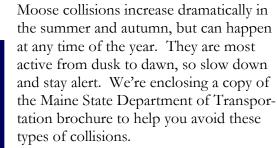


We should be

welcoming these birds with open arms. The phoebes, along with the swallows, assorted flycatchers, and many other birds eat millions of insects each day. Just imagine how bad the black flies (and other biting insects) would be without them!!

Photos clockwise from left :Yellow bellied sapsucker on post, young phoebes emerging from gutter, female osprey on nest, yellow bellied sapsucker on guardrail

## Moose on the Roads





## Dealing with Weather Extremes (Part 2)

Here in Northern Maine we're not subjected to the same extremes of weather as in some other parts of the country. Major hurricanes, tornadoes and extreme high temperatures rarely bother us, but that doesn't mean we're not at risk for dangerous weather during the spring, summer and fall of the year.

Lightning, for instance, can be deadly.

Most people take lightning for granted unless they are in the midst of a thunderstorm. But lightning can strike when it is a beautiful blue sky day and can strike from 10 miles away. If you can hear the rumble, you are within striking distance. Here are some helpful tips to lessen your chance of being struck by lightning:

- If you hear thunder, or see signs of an approaching thunderstorm (towering clouds or dark skies) head for a building with wiring or plumbing. The wiring etc. will help ground the building.
- If unable to enter a building, head for a hard topped metal vehicle (not a convertible or rag top Jeep). The tires will work to ground the vehicle.
- Avoid corded telephones, computers and plumbing, don't take showers or do dishes. These items conduct electricity.
- Avoid open areas and isolated trees. Lightning is drawn to the tallest object.
- If you are caught out in the open and experience signs that lightning is about to strike (a tingling sensation or hair standing up) squat low with feet close together (heels and toes apart), head between knees and hands over your ears. You are trying to make the smallest target possible without lying on the ground, since lightning travels along the ground.
- **4** Avoid water, as water conducts electricity.

For more information contact www.lightningsafety.noaa.gov



Remember,

Lightning Kills - Stay Safe

Lightning Awareness Week
June 20 -26, 2004

High heat and humidity can also be a problem. It can cause a variety of illnesses such as heat cramps, heat exhaustion and heat stroke.



Hot, humid weather is a deadly combination. Since high humidity slows the evaporation of sweat your body cannot cool itself. In order to cope with these conditions you should drink lots of water to avoid dehydration and try to avoid alcohol and caffeine which cause the body to lose fluid. Remember to slow down and cool off, especially if you are feeling tired, have a headache, or are experiencing a high pulse or shallow breathing. Wearing lightweight, well ventilated clothes and a wide brimmed hat can help keep you cool. Remember, overheating can cause serious, life threatening conditions such as heat stroke.

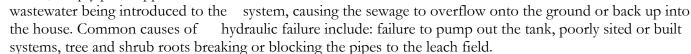
Use the chart listed here to help protect yourself and your family from the effects of high heat and humidity. For example, if the temperature is 95 and the humidity is 50%, find the 95 on the left of the chart and 50 on the top, follow those lines until they meet and you get a reading of 107, which puts you in the danger zone. At this level, outdoor activity is not a good idea. You'd be running the risk of sunstroke, heat cramps and/or heat exhaustion and possible heatstroke with prolonged exposure or physical activity.

# Protecting Groundwater & Your Septic System

Summer 2004

Out of sight, out of mind. That's a perfect description of what many people think once they flush the toilet or empty the sink. Many people in this country and especially in Aroostook County have private septic systems, that lurk quietly beneath the ground until the system fails and the homeowner (and everyone in the surrounding area) is faced with a both a financial and environmental nightmare. Septic system failures can pollute nearby streams, lakes, ponds, rivers and groundwater. A few simple steps can keep your septic system functioning happily for years.

Septic systems fail for many reasons, improper design or installation, overloading or inadequate maintenance. These failures are usually broken down into two types, hydraulic and phosphorous treatment failure. Hydraulic failure, simply put, happens when the soil cannot handle the amount of



Phosphorous failure occurs when the soil type, usually course or sandy soil, allows phosphorous from household cleaning products to pass untreated into the ground water. Unfortunately this type of failure is not easily detected.

Many homeowners are under the impression that once the septic system is installed there is nothing more to do. This is far from the truth; a little regular maintenance can help your system to function well for an average of 15 to 25 years!!

## For a Healthy Septic System

- Inspect your tank regularly
- Pump tank regularly 2-3 yrs for year-round homes
   4-5 yrs for seasonal residences
- Compost food garbage or place in trash
- Keep a grease can handy
- Conserve water by using water saving devices
- Use non-toxic cleaning supplies
- Plant trees and shrubs downhill from system to act as an additional filter

#### *But* . . .

- **Don't** drive or park on septic tank or leach field
- Don't plant trees or shrubs over system
- **Don't** use a garbage disposal it adds up to 50% more solids into your system
- **Don't** pour grease or oil, paint or paint thinner of any kind down the drain
- **Don't** use phosphorous detergents
- **Don't** use too much water
- **Don't** use chemical drain cleaner or other toxic chemicals
- **Don't** use chemical or biological septic system cleaners (they can actually plug up leach fields and ruin your system!)

### Signs of hydraulic septic system failures

- Sewage *odor* near the septic tank or leach field
- **Standing water** over the tank or leach field
- *Slow running* drains and toilets
- A Patch of bright green grass over the leach field in winter or lush green growth over spongy ground in summer.



#### Phosphorous treatment failures

often have no visible signs. Testing drinking wells for phosphorous is one way to tell if this type of failure is occurring. Foam in lakes and streams is not a reliable indicator of this type of failure as foam is also a natural occurrence. Natural foam has an earthy or fishy aroma, while detergent foam often carries the perfumed scent advertised by many household products.

If your system is showing any of these signs or if you aren't sure, contact a professional immediately!



Page 6 Skitkomiq Nutacomit

Summer 2004

#### Skitkomig Nutacomit

#### Page 3

## Understanding Stormwater

The Environmental Protection Agency (EPA) has joined with The Weather Channel to produce a program about watersheds entitled "*After The Storm*".

Many people think that storm water is just the water that comes with a rainstorm, hurricane or snow melt. Actually storm water is that and much more. Storm water runoff is rain or snowmelt flowing over the ground, that can't soak into the ground naturally. This may be due to impervious surfaces such as driveways, sidewalks and streets. It can cause a multitude of problems as this storm water collects all sorts of chemicals, pollutants and debris and deposits it into storm drains, or directly into streams, lakes,

ponds, rivers, and coastal waters. The debris, pollutants and chemicals can cause many negative impacts on people, plants, animals and fish.

Please refer to the enclosed booklet for more information on storm water and what you can do to help reduce your impact on the environment.

#### The Weather Channel

will be airing this program again on:

**Saturday June 26, 2004** 8:30 pm and 11:30pm Eastern

Saturday September 18, 2004 8:00pm & 11:00 pm Eastern

## What's in a Gallon of Gas?

That question was recently answered in an article by Susan Kruglinski in the April 2004 issue of Discover Magazine.



Most people know that fossil fuels come from plants that died long ago. Jeffrey Dukes a biologist, ecologist, and dabbler in biogeochemistry at the University of Massachusetts wanted to know just how much plant matter does it take to make a gallon of gasoline? Dukes set out to find the answer.

"A gallon of gas represents roughly 100 tons of plant matter, the amount that exists in 40 acres of wheat. Burning that gallon puts 20 pounds of carbon dioxide into the air. The annual consumption of gasoline in the United States, about 131 billion gallons of gas, is equivalent to 25 quadrillion pounds of prehistoric biomass and releases some 2.6 trillion pounds of carbon dioxide. The numbers are even more sobering when you consider all the fossil fuels - coal, natural gas, and oil -that people consume. Since 1751, roughly the start of the Industrial Revolution, humans have burned the amount of fossil fuel that would have come from all the plants on Earth for 13,300 years."

## Skicinuwatwateneh Let's speak Maliseet



This fall an "Introduction to Maliseet Language" course will be held Fridays from 2:00 to 4:45 pm beginning August 30, 2004 at the UMPI Houlton Higher Education Center. The course will be taught by Imelda

Perley and will be a full 3 credit course.

Native students are eligible for a tuition waiver. This course will also satisfy the language requirement for other academic programs.

For more information, contact Brian Reynolds, Education Director at 532-4273 ext. 214 or the Houlton Higher Education Center at 521-3100.

## Who Am I?



I've recently been seen near the administration offices.

Do you know who I am?

จนเจ้กวเอ<sub>ส</sub> : เอ**เกริเบ**ร

## Reducing Backyard Burning



Summer 2004

Backyard burning, a common practice in many parts of the country, has come under scrutiny in recent years. The smoke from these fires contain many dangerous chemicals.

When people hear the word dioxin, they often usually think of paper mills and manufacturing plants. But did you know, the burning of household waste products is actually one of the largest known sources of dioxins in the nation?

Just what exactly are dioxins? Dioxins are long lasting organic compounds that are highly toxic. They have been linked to many health problems such as developmental and reproductive disorders as well as cancer. Dioxins are quite dangerous, even at extremely low levels.

Dioxins are formed as a result of the burning of products containing carbon and chlorine. Since burn barrels do not have the same strict controls as some municipal and industrial incinerators, back yard barrels contribute significant amounts of dioxins to the environment. Once dioxin enters the environment it accumulates in the food chain. (see diagram below)

Other Pollutants - Dioxin is not our only worry when it comes to burn barrels. Smoke and ash from these barrels contain many hazardous pollutants such as lead, mercury, sulfur dioxide, hexachlorobenzene, chromium, arsenic and particulate matter. You do not need to be the person doing the burning to be affected by these pollutants. Smoke and ash launch toxins into the air and are then deposited into the environment, where they often make existing respiratory conditions like asthma and emphysema worse. Children and anyone working or playing outside are exposed to these toxic materials from dirt on their hands or on their skin.

#### WHAT YOU CAN DO

**REDUCE** - Reduce the amount of waste you generate. Use long lasting durable goods and avoid disposable items

**REUSE** - Repair, sell or donate used or unwanted items

**COMPOST** - Composting food scraps and yard wastes is a great way to reduce your trash while creating great, natural free fertilizer

**REYCYLE** - Take full advantage of area recycling programs to recycle your paper, plastic, glass and more

DISPOSE OF WASTE PROPERLY
Use a waste collection service, transfer station or landfill. Don't litter or dump illegally

For more information contact

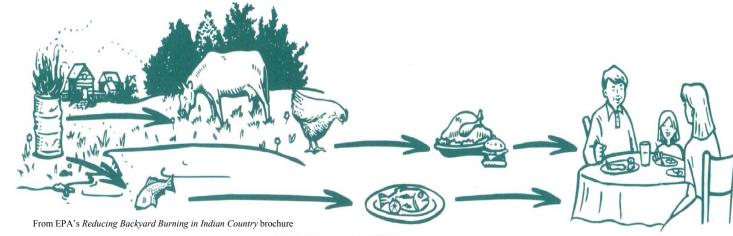
EPA's Backyard Burning Site at

www.epa.gov/msw/backyard

EPA's Dioxin Website

www.epa.gov/ncea/dioxin.htm

Dioxins in the food chain



It's hard to believe it's that time again. The Natural Resources Department has just been joined by four new summer technicians.

Water Resources technicians Ashley Tompkins and Rhonda Jewell will be working with Dave Joseph and Cara Ellis on a number of water quality monitoring projects.

Meanwhile, Joey Tomah and Phil Quint, Jr. will be working alongside David Lombard to install the interpretive signs along the nature trail, perform trail maintenance and work on enhancing wildlife habitat on tribal lands.



Water Resources Techs (above) Ashley Tompkins (left) and Rhonda Jewell

Skitkomig Nutacomit



## Nature Trail Update

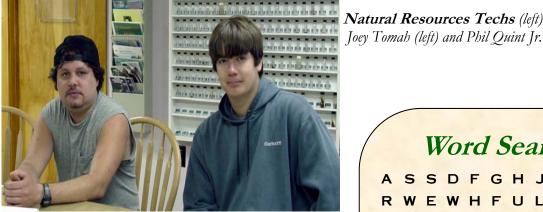
With the arrival of this vear's Natural Resources Summer Technicians, David Lombard and crew

Painted Trillium (Ttrillium undulatum) will be returning to the trail

to install the newly designed interpretive signs. We will be announcing the official grand opening of the trail in coming months.

In the meantime, we'd like to encourage you to explore the trail on your own. Right now there are a number of wildflowers in bloom including the painted trillium shown here and the blue bead lily otherwise known as Clintonia. Wildflowers will continue to bloom and the varieties change as time passes, so the more often you hike the trail the more you will have the opportunity to see.

If you have any questions or would like a guided tour of the nature trail, please drop by or give us a call at 532-4273 ext. 202 or ext. 220



Word Search Puzzle

ASSDFGHJKLMNSBVC RWEWHFULLMOONQZX TEYUNATURETRAILI HANJIOBKKNMLGPPO UTYBMGWILDFLOWER TLRUFAVCTDEWLSXZ AORQHQETUAOLIFJG DDIOXINAZCTBGINB AGESAPSUCKERHSCD AEBPCDEMFGCHTHIJ KLMRNOPUQRHSNITU PHOEBEVSUNSHINEW XYZYABCKDEFGNGHI J K L M N W A R B L E R G O P Q RSTUVWXAYZPOIUYT REWQASDTFGHJKLMB DIOXIN LIGHTNING SNAG DRUM MUSKRAT SUNSHINE

NATURE TRAIL

OSPREY

PHOEBE

SAPSUCKER

SWEATLODGE

**WILDFLOWER** 

**TECHS** 

WARBLER

FISHING

**HABITAT** 

HAWK

FULL MOON

## Understanding GIS

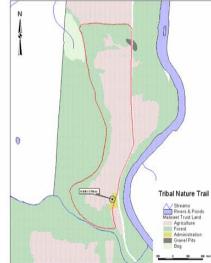
Summer 2004

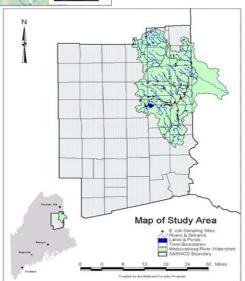
On May 19-21, 2004 Natural Resources Department members Cara Ellis, Dave Joseph, David Lombard, Tony Tomah and Sharri Venno traveled to Orono to take an Introduction to ArcGIS 8.3 training course. Also joining the Natural Resource Department was Ken Bailey, from the BIA Natural Resources Remote Sensing division.

The course taught by Connie Holden of UMO's Department of Spatial Information Science and Engineering gave department members hands on experience with ESRI ArcView GIS mapping software. Through the use of this software, along with GPS (Global Positioning System) technology, the natural resources department will be able to better map tribal lands and area resources that impact tribal lands.

Environmental Protection/Forestry Specialist David Lombard has been using ArcView version 3.1 to help map tribal projects and resources. A sample of the type of maps David has generated using this GIS technology include the directional, watershed and nature trail maps. Examples are shown here to the right.

In the coming months the department hopes to expand their use of GIS in various projects. If you'd like more information on GIS/GPS or to see how this software works, please do not hesitate to contact







## Congratulations Ryan!

We're pleased to announce that tribal member Ryan Greenlaw, a 2001 Summer Technician has entered into the BIA Water

Resources Training program held in New Mexico.

Once Ryan successfully completes the 4 week program, he will receive a voucher, good for a one year, temporary position with the HBMI Water Resources program as a Water Resources Intern.

Tribal member Dave Joseph also completed this program back in 1996 and has since become a valued member of the Water Resources program.

