From the Editor

Spring has sprung, butterflies are flying, ticks are hungry, buds are bursting . . . so starts another field season at Forest Health.

Phenology always seems more popular at this time of year . . . maybe we’re happy to welcome the signs of spring but not so keen on celebrating the yearly events of the fall. This Insect Focus highlights a project that has a long history in NS.

There are notes on the changes to the tick passive surveillance survey that will come into effect on 1 June on page 3 and a copy of the tick info sheet on page 6.

Balsam gall midge has been creating some difficulties for Christmas tree growers. Keith has been watching the situation and provides an update.

’Til next time,

Jacqui

Editing . . . a Rewording Activity

Say What and Quotes . . .

Anyone who thinks there’s safety in numbers hasn’t looked at the stock market pages. -Irene Peter

Ah, summer, what power you have to make us suffer and like it. -Russell Baker

A person without a sense of humor is like a wagon without springs. It’s jolted by every pebble on the road. -Henry Ward Beecher

Common sense and a sense of humor are the same thing, moving at different speeds. A sense of humor is just common sense, dancing. -William James

Bill Gates is a very rich man today . . . and do you want to know why? The answer is one word: versions. -Dave Barry

Everybody gets so much information all day long that they lose their common sense. -Gertrude Stein

Getting information off the Internet is like taking a drink from a fire hydrant. -Mitchell Kapor

Perspective is worth 80 IQ points. -Alan Kay

The Internet is a telephone system that's gotten uppity. -Clifford Stoll
Phenology - Putting a Name to Something We Already Do
Jacqui Gordon

Betcha didn’t know that you were a phenologist . . . sorry, it probably won’t get you a pay increase but it may put a name to the simple observations that we make throughout the year. In March, waiting to hear the first spring peepers of the year and watching for the first coltsfoot flower on the side of the road, discussing the preference for black flies or dog (wood) ticks as we prepare for Mother’s Day in May, and knowing that plague of black flies is quickly followed by the scourge of mosquitoes.

Phenology, which is derived from the Greek word phaino meaning to show or to appear, is the science of periodic biological events in the animal and plant world as influenced by the environment, especially weather and climate. Sprouting and flowering of plants in the spring, colour changes of plants in the fall, bird migration, insect hatches, and animal hibernation are all examples of phenological events.

For many years people have kept records of when certain biological events happen to compare year to year occurrences and used this information to plant crops or monitor/control insect pests. In the early 1900’s Dr. Alexander Howard MacKay initiated a pheonology project in Nova Scotia. School students collected more than 200 observations and submitted their results. The project continued for 23 years. Other more current projects such as Thousand Eyes and PlantWatch encourage people become involved in recording yearly biological and weather events.

And you may be seeing how this all relates to our work in Forest Health. I was in New Minas on 1 May this year and noticed that the serviceberry was blooming. This is significant because as a general rule when the serviceberry blooms, gypsy moth egg masses hatch. A couple of years ago, I took a picture of an egg mass in Kentville on 10 May that had just hatched. Hmmm . . . guess the gypsy moth larvae will be making an early appearance this spring.

Those of us who were placing brown spruce longhorn beetle traps had to be ready to go early this year. The CFIA moved the deployment date up a week to allow for a possible early flight. Here at Forest Health we’ll be placing our spruce budworm moth traps earlier this year as well.

An important thing that I have learned over the past years is how vital it is to be aware of what’s going on in your property. Whether it’s a backyard garden, a Christmas tree lot, woodlot, or plantation, it’s a good idea to keep an eye on your investment. And maybe start recording a few notes here and there . . . who knows? it might be the start of a great hobby and valuable resource.

References
PlantWatch: http://www.naturewatch.ca/english/plantwatch/
During a visit to my doctor, I asked him, "How do you determine whether or not a retiree should be put in an old age home?"

"Well," he said, "we fill up a bathtub, then we offer a teaspoon, a teacup, and a bucket to the retiree and ask him or her to empty the bathtub."

"Oh, I understand," I said. "A normal person would use the bucket because it is bigger than a the spoon or the teacup."

"No" he said. "A normal person would pull the plug. Do you want a bed near the window?"

And to carry on the phenology theme . . .

- A Tiger Swallowtail was seen flying in Mill Section (just outside of Windsor) on 29 May
- A deer fly was caught in Windsor on 29 May
- Well-developed eastern tent caterpillar nests were seen in Shubenacadie on 25 May

If the blacklegged tick sample is not accompanied by the full mailing address of the collector (including postal code), the tick will not be sent for testing.

Fig. 2 Eastern tent caterpillar nest. Photo credit J. Gordon
Project Update

Whitemarked Tussock Moth Egg Mass (Overwintering) Survey
Terry White

In 2009, there were 344 sample points completed in the province for whitemarked tussock moth egg mass (overwintering) survey. These points were completed province-wide by Pest Detection Officers as well as Forest Health staff.

Of the 344 sample points collected, egg masses were found at 26 locations. 63 egg masses found in total.

This survey looks at a maximum of 20 trees per location. Three branches on each tree are searched for egg masses. All positive locations surveyed in 2009 were in the Low population category.

Fig. 3 Whitemarked tussock moth egg mass survey results, 2009.
The information on this map may have come from a variety of government and non-government sources and is subject to change without notice. The Nova Scotia Department of Natural Resources accepts no liability for errors, deficiencies, or faults on this map.
The Birds are Singing and I’m Looking for Balsam Gall Midge.

Keith Moore

The longest day of the year is approaching (And I don’t mean the in-laws are coming for a visit!) I love these long daylight evenings when I can walk around the old homeplace with a Bobolink singing in the apple tree at 9:00 o’clock at night. Their black and white colours blend in pretty good with the apple blossoms. They sort of sound like running, bubbling water; one has a nest in the heavy grass in between the rows of fir I have planted and was busy putting on a show like only the Bobolink can do!! The reason for being in the fir plantation was to check for any balsam gall midge and to see how far along the new growth was and to hear the Bobolink’s spring song.

Another gall midge year is here, that’s for sure. The gall midge (Paradiplosis tumifex) overwinters in the soil under the host balsam fir tree. Its lookalike parasite (Dasineura balsamicola) that keeps it in check overwinters there as well. When the caps come off the fir buds, the gall midge emerges and, while the new growth is green and tight, begins to lay eggs on the needles. The parasite emerges a few days later and begins to lay eggs beside the gall midge eggs. It only takes 3 to 4 days for the gall midge and the parasite to hatch.

This year the first reports of gall midge came from Yarmouth area on 8 May, Digby on the 10 May, Musquodoboit and Bridgewater at their peak on 19 May. They could be seen in some lots trying to lay their eggs on closed bud caps, a little out of whack there. Christmas tree growers were waiting for the buds to unfurl to about 1½ inches in length to begin treatment of the newly hatched larvae before they have a chance to form galls. Once in the gall, they are hard to get at.

Okay, so the parasites are high and will control 90% of the gall makers in the 3rd or 4th year and then the population will collapse. Why should I treat? The only way the gall maker can be brought down by the parasite is after the gall maker has made the gall on the needle. In other words, the damage is done. With such high numbers of gall makers, most growers can’t afford that type of needle loss on their trees. There are some reports of tree lots with very low numbers of gall making midges that were heavily damaged last year and others where the numbers are still building. By mid-June, when you receive this note, we should be able to see the damage, the galls will be formed, and hopefully the numbers will be lower for some lots . . . Not all, but some.

Take time to enjoy the spring and early summer weather and just like the Bobolink, keep singing!
Blacklegged Tick

Description and Life History
- 3.7 mm; dark brown to black in color with no white markings often with a reddish abdomen.
- a three-host tick and generally taking two years to complete its life cycle.

Ticks Commonly Confused with Blacklegged Tick

What are We Doing?
Monitoring the Blacklegged Tick population in Nova Scotia by:
- a province-wide passive survey conducted by Nova Scotia Department of Natural Resources (NSDNR), Nova Scotia Health Promotion and Protection (NSHPP) and the Nova Scotia Museum (NSM) - specimens are submitted by the public, veterinarians, physicians and NSDNR staff.
- a study is ongoing with the Public Health Agency of Canada to monitor the spread of the Blacklegged Tick and any Lyme disease within this population. Information is being collected by drag sampling, small mammal trappings and hunter-killed deer surveys.

For further information contact:
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Forest Health
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Shubenacadie, NS B0N 2H0
(902)758-7226
The Last Laugh . . .

. . . From a list of comments and answers from test papers, essays, etc., submitted to science and health teachers by elementary, junior high, high school, and college students.

"The body consists of three parts - the branium, the borax, and the abominable cavity. The branium contains the brain, the borax contains the heart and lungs and the abominable cavity contains the bowels, of which there are five - a, e, i, o, and u."

"Water is composed of two gins, Oxygin & Hydrogin. Oxygin is pure gin. Hydrogin is gin & water."

"Three kinds of blood vessels are arteries, vanes and caterpillars."

"H2O is hot water, and CO2 is cold water."

"The pistol of a flower is its only protections against insects."

"The tides are a fight between the Earth and moon. All water tends towards the moon, because there is no water in the moon and nature abhors a vacuum. I forget where the sun joins in this fight."

While on a trip with the family, I thought it would be good to teach my 5 year old daughter some things.

As we past a sign I told her that is the name of the town for the next exit. As we past the exit I told her how we were passing the town.

A few exits later she noticed the sign for gas. As we passed the exit, much to her delight, she informed us we were passing gas.

Joan went to a psychiatrist. "Doc," she said, "I've got big troubles. Every time I get into bed, I think there's somebody under it. Am I going crazy?"

"Just put yourself in my hands for one year," said the shrink, "Come to me three times a week, and I'll cure your fears."

"How much do you charge?"

"A hundred dollars per visit."

"I'll sleep on it," said Joan. Six months later the doctor met Joan on the street.

"Why didn't you ever come to see me again?" asked the psychiatrist.

"For a hundred bucks a visit? No way! Instead, I went on one of those 'Dude Ranch' vacations, and an old cowboy cured me for the price of a bottle of whiskey."

"Is that so! How?"

"He told me to cut the legs off the bed! Ain't nobody under there now!!!