

# BOREAL BITS

PHIL BURKE



## FECUNDITY

*“Everything in excess is opposed to nature.” Hippocrates (B.C. 460-370)*

We invite Mr. Hippocrates to read on. A cattail grows in a marsh. Thanks to ideal conditions the plant has flourished during the spring and summer weather. Now it boasts long, healthy leaves and a stalk holding a fat, dark brown seed head. The seed head contains seeds necessary for reproduction of the plant species. Only one seed is necessary for the plant to replace itself but the seed heads hold more than one seed each, they hold up to a quarter of a million seeds. If this fecundity weren't enough, the plant can also spread through its root system.

Mice are very fecund. Left unchecked by predator, disease, starvation or climate, a pair of deer mice can produce over 4 litters a year with 2 to 7 young per litter. Young deer mice grow rapidly and can breed at the age of 5 to 6 weeks. If all the young survived, we would be overrun with these mice in a very short period of time. A leopard frog lays 3000 eggs each spring and a healthy walleye can lay 23,000 to 50,000 per pound of fish weight. A mosquito can be very prolific laying clutches or rafts containing from 100 to 400 eggs. Each of the hundreds of small crabapples on the ornamental tree in our yard houses seeds. Fecundity it what it is all about for most species.



Then there are the insects that are no strangers to this area of the boreal forest, the forest tent caterpillar. When their cycle peaks, these monsters of defoliation consume tonnes of vegetation a day, denuding forests for as far as the eye can see. This is made all the more difficult to take by a green-starved population that waited through many bleak and leafless months, fervently waiting for the rebirth. Then it is quickly taken away, often before the leaves have reached their full size. Fortunately the invasion is spent by the end of June but then after cocooning, the moths have their fertility fling and the females lay egg clusters, each containing about 250 to 300 eggs. Is it any wonder that when the peak cycle begins, the insects increase summer by summer until limiting factors finally catch up with them. Thank nature for the fact that all tent caterpillar worm eggs don't hatch and if they do, they don't all survive to munching maturity.

Weeds tend to be fecund, particularly those we find in our gardens and lawns. The lowly dandelion, our most renowned weed, reproduces by sending out hundreds of the famous little parachutes using the breezes to disperse its seeds. It can also reproduce from pieces of the taproot which explains why using the hoe isn't such a good idea unless you get all the root.

Of course, unwanted garden plants don't hold the title for fecundity. A good cob of corn holds many hundreds of seeds and anyone who has cut into a watermelon knows the plant



is serious about reproduction. It seems the smaller the seeds, the more the plant produces. More than one writer has complained about how incredibly wasteful Mother Nature can be. Among the more notable is Charles Darwin who stated, “What a book a devil’s chaplain might write on the clumsy, wasteful, blundering, low and horribly cruel works of nature.” Why produce a million seeds per plant, when, with a little adaptation, survival could be guaranteed through other means? Answers to questions such as these wander quickly into the realm of philosophy but one thing is for sure; You can’t fault the common mullein for producing thousands of seeds per plant when only one is required for the plant to replace itself. After all, the mullein has survived for countless millennia.

Success, it seems, is in long-term survival.

(Photos – P. Burke)