**Cryogenic Tactics of the Wood Frog**

Some animals migrate south for the winter; some hibernate in dens. Most salamanders burrow below the freeze line underground, but wood frogs survive winters as far north as Canada, protected by only a few inches of leaf litter. They are able to do this because instead of fighting the cold, they simply allow their bodies to freeze.

Cryogenics, anyone? Humans and most other animals cannot survive freezing, because ice crystals cut their cells. Wood frogs, however, have a powerful tool against this type of damage— urine. Simply put, wood frogs shunt urine into their bloodstream to act as a sort of antifreeze to prevent the formation of large ice crystals. They also draw water away from their vital organs and produce vast quantities of compounds that help repair damage.

After sitting under the leaf litter as a frozen frogsicle all winter, a wood frog thaws out and moves straight for its vernal pool to look for a mate. There is no time to lose, as wood frogs are “explosive breeders,” meaning that they have a short window of time in which to find a mate and lay their eggs. Hundreds of them can converge on a pool at once, the males giving a “laughing quack” call to attract females.

Side by side, the females lay floating masses of eggs, often forming huge rafts of thousands of eggs. This breeding activity is short and intense, sometimes occurring over a few nights or only one night. There is no time for cold feet!

Submitted by Hannah Bement