As we celebrate the advent of the warmth of summer, we also begin the annual battle initiated by the arrival of bugs. Like most health management issues for our four-legged friends, fly and mosquito control requires a multi-pronged attack.

The following are some especially effective methods for controlling the insect population plaguing your animals:

- **Manure management.** Composting contaminated bedding and manure. Locate your compost pile away from the barn to entice the flies away from the areas of housing and activities.

- **Water control.** Standing water is a natural attractor for flies and especially mosquitoes. Fill in any low areas or put in culverts to divert standing water. Clean water troughs on a routine basis to minimize any mosquito larvae growth.

- **Regular mowing and dragging of pastures** keeps breeding areas down.

- **Fly sheets, masks and boots.** Horse clothing made of mesh that physically blocks the biting bugs’ access to the horse. A word of caution about masks: remove them at least every day to ensure that there are no surprises underneath, namely rubbed areas or eye ulcerations.

- **Insecticidal/repellent sprays.** A two-pronged approach including a repellent, citronella and cedar of tea oil that masks the scent of the horse combined with an insecticidal agent, either a natural pyrethrin, which comes from crysanthemums or a synthetic pyrethroid. Both products deter biting bugs from lighting and kill the ones that come in contact with the horse.

- **Fans.** Large exhaust fans keep air circulating and deter pests in two ways. Mosquitoes and biting flies are attracted to carbon dioxide that mammals exhale. Circulating the air not only mechanically disrupts the pest, but dissipates the attractant gases.

- **Misting systems.** Automated misting systems release a fine spray of pyrethrin or pyrethroid at a timed interval throughout the day killing any bugs in the barn and providing a residual on the horse’s coat.
**Fly Predators.** This is a product that releases tiny Hymenoptera insects, which is a family of insects that contains many of the world’s beneficial insects, but also the biting wasps, bees and ants. Unlike their stinger-equipped cousins, Fly Predators are completely stinger-less and bite-less. Once released from the shipping container, the female Fly Predators search through the host area seeking out the pest fly’s pupa. The female then drills a hole in the pupa case and deposits several eggs inside. After these eggs develop into mature adults they consume the fly larva as a source of food, thus killing the larva. Immediately upon emergence from the pest fly pupa, the Fly Predators are ready to mate and start the cycle all over again.

**Zappers.** While this method is effective for eliminating the pests, you may wish to employ other methods, as a particularly nervous animal may not react favorably to the sounds produced by an especially “juicy” victim.

**Traps.** Most traps rely on food, pheromones or some other attractant to entice a bug into a chamber from which they can’t escape. The “big stinky” pots that have been observed in some barns seem to do a stellar job if you don’t inadvertently turn one over.

**Turn-out schedule.** Most mosquitoes, gnats and no-see-ums are most active at dawn and dusk. Avoiding turn out at this time for those horses sensitive to biting bugs.

A final word about biting bugs: in spite of all the chemicals, clothes, fans, parasitoids and zappers we can throw at them, they are still going to be around. West Nile Virus has already been identified in mosquitoes in Illinois this year. If you haven’t vaccinated your animals against West Nile Virus and the encephalidides, it is strongly encouraged that this be done soon. Your local veterinarian can assist with this vaccination.