

## **Skin Allergies and Insect Hypersensitivity**

We generally see insect hypersensitivity related to culicoides species (biting midges), black flies, horn flies, house flies, horse flies, deer flies, stable flies, bees, and wasps. One of the first signs is itching that can progress to hair loss and raw or scabbed areas of irritation. The distribution and location of skin lesions depends on the type of insect involved. Many horses with culicoides hypersensitivity have lesions on their chest or abdominal midline area. Other affected areas are the base of the tail, rump, back, withers, crest or mane, pole, and ears.

Signs are usually seasonal, first appearing in spring and worsening in the summer before regressing in the fall. In warm climates such as Florida, the “season” may last up to 10 months per year or could continue year round. The signs are recurrent and often worsen each additional year.

Different insects have specific environmental requirements under which they flourish. Culicoides and mosquitoes love standing water. In contrast, black flies propagate around moving water such as a stream. Horn flies need cattle manure to live while stable flies do best in manure or decaying vegetation. Stable flies, black flies, horn flies, and house flies are generally active during the daylight hours. Culicoides and mosquitoes are most active at dusk and the first couple of hours after sunset. We can manipulate our environment to limit our horses’ exposure to those insects that “bug” them most.

Culicoides hypersensitivity is one of the most common insect allergies. These tiny biting midges like to be out at dawn and dusk, but they cannot fly effectively in wind. Ideally you can stall your horse from late afternoon until dawn and keep a ceiling or box fan on them. You can also insect-proof the stall using a very fine mesh screen (much smaller than regular window screening). Try to eliminate standing water on the property, or move the horses to a high, dry area.

In addition to environmental control, the other aspects of treatment include insect control, the use of corticosteroids, and/or allergy testing followed by hyposensitization shots. Insect control means applying insecticides and repellents to the horses every day in the late afternoon. A residual fly spray that contains ingredients such as pyrethrins or pyrethroids is effective. Sprays with permethrins and pyreproxifen (e.g. Knock Out Spray) or Skin So Soft, citronella oil, and Essentria C3 (domyownpestcontrol.com) can be added to your regular fly spray. Using facemasks or ear nets are good tools to fend off black flies, face flies, and house flies.

When a horse’s itching worsens and we find it difficult to control the symptoms through environmental management and insect control, we may prescribe a steroid (e.g. Dexamethasone). This is typically a once a week injection or oral supplement, although we may adjust dosages as needed. Antihistamines appear to be of no value in treating hypersensitivity.