

# The West Nile Weekly

**SUMMARY:** By October 10th almost all areas should have experienced their first frost event, and mosquito activity should be severely suppressed. Case numbers will continue to increase as the year ends, but these are new reports of old cases, not new exposures to the virus.

## How are the mosquitoes?

*Culex tarsalis* have nearly vanished completely from traps, and in every year on record the species declines at this point - there are no longer any resurgences. *Aedes vexans* are falling back towards normal levels after an unusual explosion caused by unusually heavy precipitation. This nuisance species may rebound before the year ends and there may be complaints.

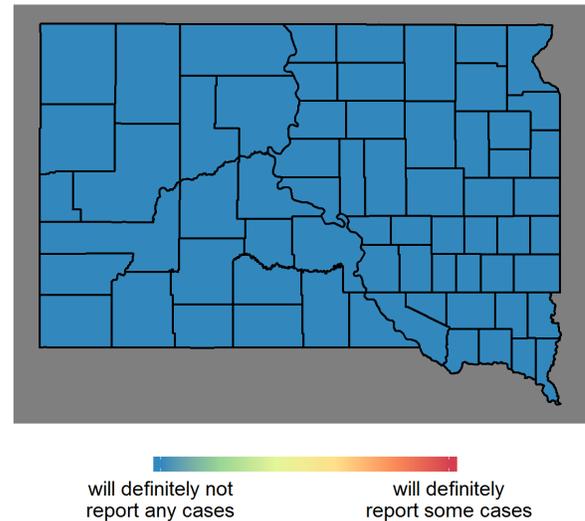
By Oct. 10th, almost all counties will probably have experienced at least one frost event, which should severely dampen all insect activity. Most female vectors entering the winter will have mated, but will have [stopped taking blood meals](#) so that they can overwinter without producing eggs.

## What to expect?

Historically, 99.5% of all cases occur before Oct. 10th, and only a small handful of cases afterwards. The season will be essentially done by this date, but reported numbers from the SDDOH will continue to rise as older cases are reported to the state. That is, while numbers will continue to rise, these are due to older cases just now being collected.

We estimate that Brown Co. has just a 3% chance of reporting a case this week (Figure 1); that is, genuinely new cases should be exceptionally rare, and any cases reported are probably old cases filtering through the system.

All other counties are below this level of risk, and in most place it is safe to say that the risk is zero. Individuals should certainly swat any mosquitoes that attempt to feed, but genuinely new cases will be rare.



**Figure 1:** Estimated per-county risk for the week beginning Oct. 4th. Brown County has a 1 in 33 chance of reporting at least one case.

## What's next?

In the next WNW, which will be the last, we will publish an evaluation of the predictions we've made over the 2016 WNV season and summarize everything we've learned.

We invite everyone in SD to share their thoughts with us at the SD West Nile Virus and Mosquito Control Conference in Aberdeen on Oct. 12th. The [agenda](#) and [registration form](#) for the conference are online, and we will hold a focus group at the meeting for anyone willing to give feedback at 8:30am on October 12th. Please email [michael.wimberly@sdstate.edu](mailto:michael.wimberly@sdstate.edu) for more details.