

the environmental approach...

## WildCare Chickens Help Detect West Nile Virus

### A Cooperative Effort for Early Warning

Update from the Marin/Sonoma Mosquito and Vector Control District



Piper Kimball from the Marin/Sonoma Mosquito and Vector Control District visits WildCare every two weeks to test our sentinel chicken flock's blood.

Sentinel chicken flocks have been used successfully for virus detection in California for over 40 years. The California Department of Health Services, together with several vector control districts, maintains an active "early warning" program to help detect the presence of encephalitis viruses. This spring, WildCare agreed to work with the Marin/Sonoma Mosquito & Vector Control District to assist their encephalitis virus surveillance program. Each year, Marin/Sonoma personnel help set up and take bi-weekly blood samples from seven surveillance flocks. That is how they knew that Western Equine Encephalitis was active in Sonoma County in 1992–1994 and 1997, and in neighboring Napa and Solano counties in the fall of 1996. They will be looking for the presence of Western Equine (WEE), St. Louis (SLE) and West Nile (WNV) viruses.

A coop with eleven chickens has been set up behind the museum where the birds will be exposed to the local mosquito population. Blood samples are taken from the chickens every other week from April through October and tested for antibodies to the encephalitis viruses. If a test comes back positive, it is evidence that a mosquito carrying the virus has bitten the chicken. Chickens can carry the disease; they cannot transmit it to humans or animals. They are just a barometer for the arrival of the virus.



Unlike some avian species such as corvids, chickens are not affected by the viruses. The birds easily tolerate the blood sampling procedure and the chickens are well cared for by WildCare volunteers. Plenty of fresh food and water are being provided in a clean spacious cage, and the chickens have responded—well, like chickens. We get fresh eggs!

#### West Nile Virus Update

The West Nile virus is a strain of encephalitis disease, genetically similar to St. Louis Encephalitis, that can affect the central nervous system. WN virus causes a swelling of the brain that can be fatal in a small portion of infected people and animals. Severe illness in humans is rare, but corvids suffer a mortality rate of 80% or more. WildCare's courtyard ravens are at risk, and until a suitable vaccine is developed, every precaution will be taken to protect their health. At the date this was printed, no evidence of WNV had yet been found in California.

If you want to learn more about West Nile Virus, Piper Kimball will present an West Nile Virus Update at WildCare on Sunday, October 19. See the back page schedule for details.

For more information visit Marin/Sonoma Mosquito & Vector Control District at [www.msosquito.com](http://www.msosquito.com).