






Zoonotic Disease Report September 11th – September 17th (Week 37)

EXECUTIVE SUMMARY:

- Six human West Nile cases have been reported statewide in Archuleta (1), Boulder (2), Denver (1), La Plata (1) and Larimer (1) counties.
- Colorado had 59 positive mosquito pools (Boulder (7)) for the 2011 season. Testing has concluded for the year.
- Mosquito counts continue to be above average for this time of year.
- Mosquito control activities are winding down with limited control and surveillance continuing through next week.
- Two of seven bats tested positive this week for rabies.
- No other specimens were submitted for common diseases this week.

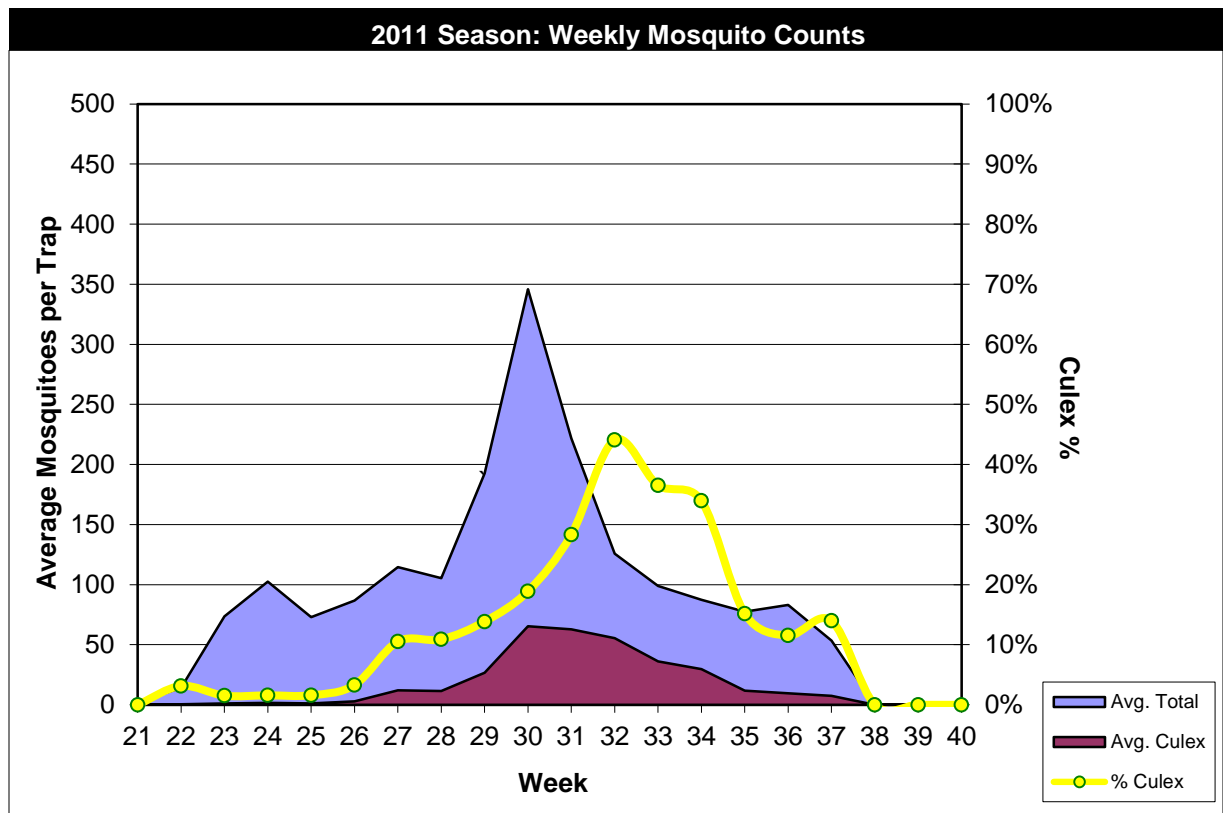
PROFILE OF COMMON ZOOONOTIC DISEASES IN BOULDER COUNTY

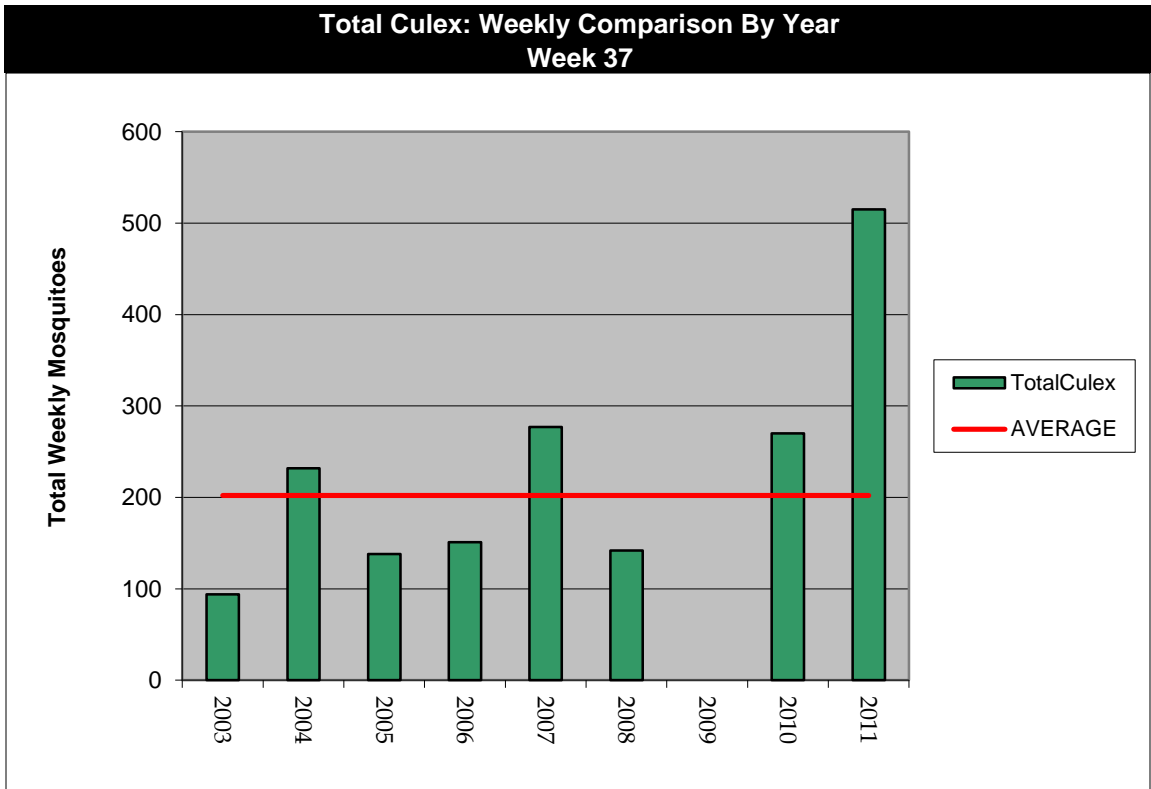
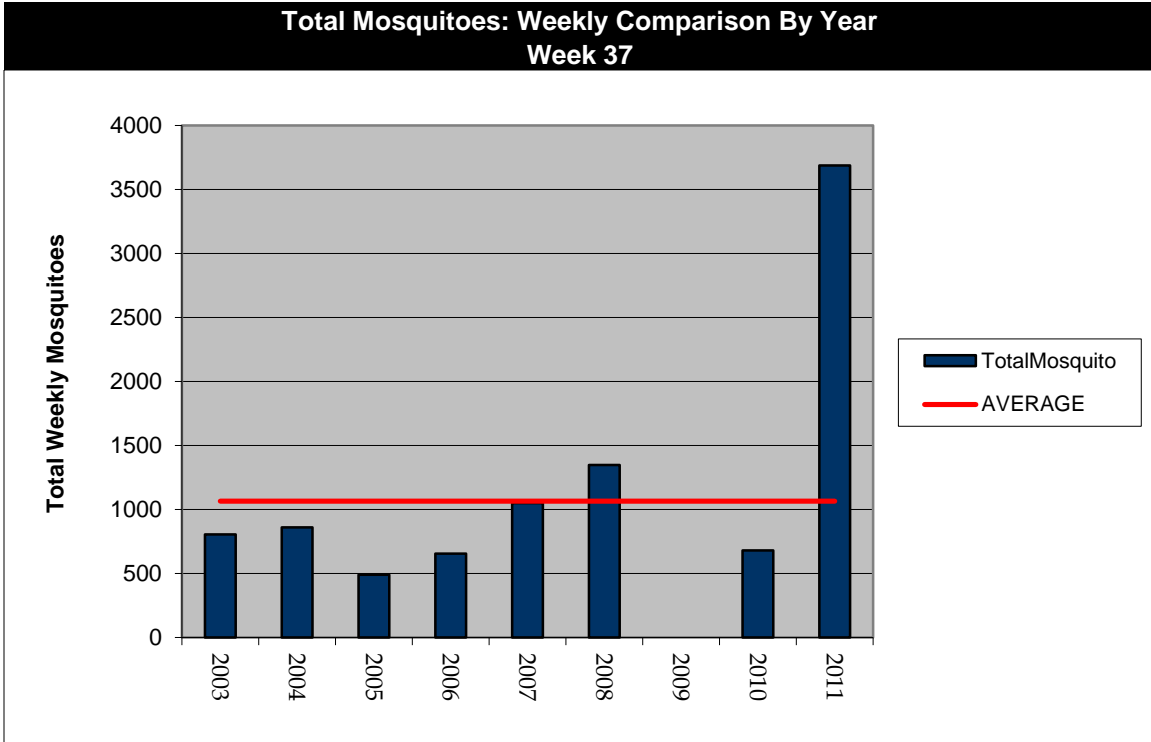
Disease	Symptoms	Vector	Prevention
 WEST NILE VIRUS	Fever; extreme fatigue, head and body aches, skin rashes. More severe symptoms can be meningitis, encephalitis tremors, vision loss, and paralysis	Mosquitoes, primarily Culex tarsalis and Culex pipiens mosquitoes in Colorado	Dress in long clothes, drain standing water; use DEET, avoid outdoors during dusk/dawn
 HANTA VIRUS	Fever; chills, headache, muscle pain in shoulders, lower back, and thighs, nausea, vomiting, diarrhea, dizziness	deer mouse, spread by inhalation of dried droppings	Prevent rodent infestation, avoid aerosoling rodent droppings when cleaning, moisten rodent droppings with water and bleach, ventilate cleaning area.
 PLAGUE	Fever; chills, headache, rapidly progressive weakness, painful swollen regional lymph nodes (buboes)	flea bites, usually roosting on infected animals	Avoid fleas and areas with wild rodents; do not touch sick or dead wild animals; prevent home rodent infestations; treat known rodent areas with flea powder; see healthcare provider if you show symptoms
 TULAREMIA	abrupt onset of fever; chills, muscle aches, headache, painful lesion at infection site, swollen lymph nodes	wild mammals, primarily rabbits, muskrats	wear gloves when handling wild rabbit carcasses; cook game meat thoroughly
 RABIES	Apprehension, headache, fever; anxiety, difficulty swallowing, seizures and possible paralysis	All mammals, Bats, raccoons, skunks, foxes, and coyotes most common	vaccinate pets, avoid wildlife, contact healthcare provider if bitten by an animal

For more information, visit our website at www.bouldercountyvector.org

Mosquito Season Monitoring

Season weeks will be reported as the epidemiological or 'CDC week' of the current year. The first full week following January 1st coincides with Week 1, and so the mosquito monitoring season roughly spans weeks 21 to 40. Here are the indicators for this week:





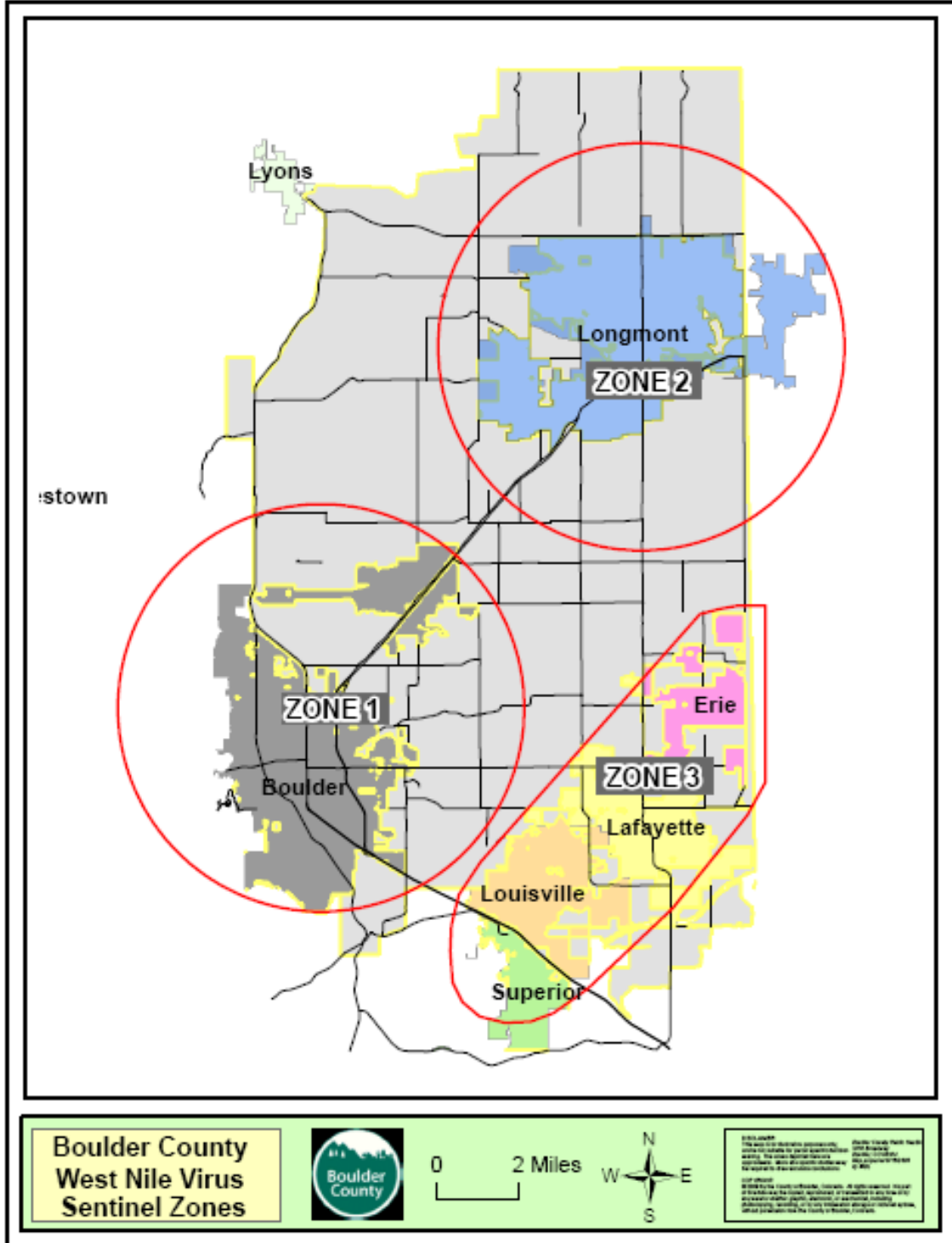


WNV Vector Index

The vector index is a weekly measure of infection rate, adjusted for *Culex* mosquito population size, within a given area. The values estimate the number of West Nile Virus infected mosquitoes collected at a given trap site on any given night. It is used to estimate human West Nile Virus transmission risk. The data on vector index as a predictor of human transmission is incomplete, but it suggests that a vector index of 0.75 or above is an indicator of high risk for West Nile Virus transmission to humans in Boulder County, and influences the Mosquito Control District's adult mosquito emergency control measures. A vector index is calculated for three monitoring zones in Boulder County as indicated on the map on the following page.

NOTE: Sentinel zone trapping has concluded for the season.

VECTOR INDEX LOG			
	ZONE 1	ZONE 2	ZONE 3
Season Week	Vector Index	Vector Index	Vector Index
Week 21	0.00	0.00	0.00
Week 22	0.00	0.00	0.00
Week 23	0.00	0.00	0.00
Week 24	0.00	0.00	0.00
Week 25	0.00	0.00	0.00
Week 26	0.00	0.00	0.00
Week 27	0.00	0.00	0.00
Week 28	0.00	0.00	0.00
Week 29	0.00	0.00	0.00
Week 30	0.00	0.00	0.00
Week 31	0.00	0.00	0.19
Week 32	0.20	0.00	0.00
Week 33	0.41	0.00	0.00
Week 34	0.00	0.20	0.33
Week 35	0.10	0.00	0.13
Week 36	-----	-----	-----
Week 37	-----	-----	-----
Week 38			
Week 39			
Week 40			





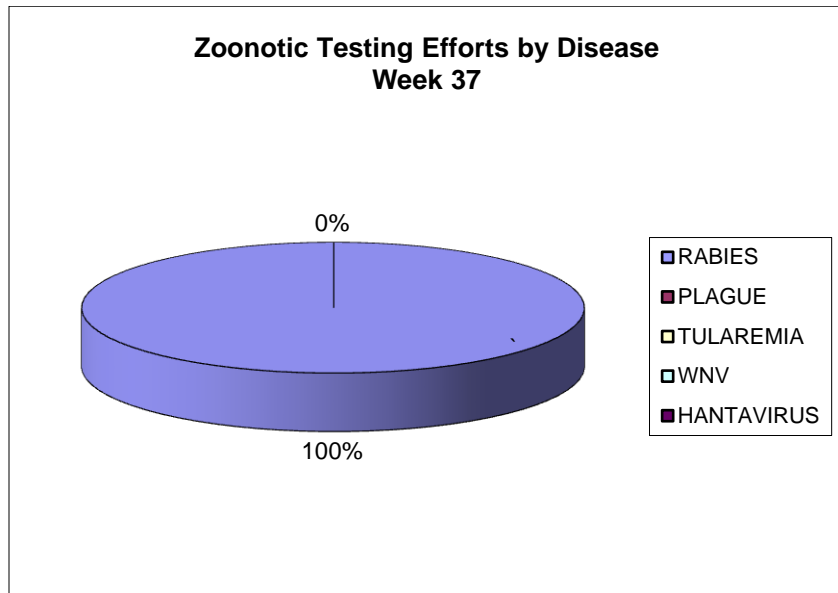
BOULDER COUNTY PUBLIC HEALTH
Environmental Health Division
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Animal Zoonotic Disease Testing and Confirmations

Each week, Boulder County and municipal Animal Control Units responds to animal complaints throughout the county. When deemed necessary, these specimens are sent to state laboratories for zoonotic disease testing. Below is a summary of these testing:

❖ **NOTE: Data are provided from the CDPHE Zoonotic Database and may not include samples submitted for testing prior to publishing of this report.**

TESTED VECTORS							POSITIVE VECTORS					
	RABIES	PLAGUE	TULAREMIA	WNV POOLS	HANTA VIRUS	TOTAL	RABIES+	PLAGUE+	TULAREMIA+	WNV POOLS+	HANTA VIRUS+	TOTAL
Wk 1-20	13	0	0	0	0	13	0	0	0	0	0	0
Wk21	2	1	1	0	0	4	0	1	0	0	0	1
Wk22	3	2	2	0	0	7	0	1	0	0	0	1
Wk23	7	0	0	0	0	7	3	0	0	0	0	3
Wk24	6	0	0	3	0	9	2	0	0	0	0	2
Wk25	7	3	3	2	0	15	2	1	0	0	0	3
Wk26	3	0	0	4	0	7	0	0	0	0	0	0
Wk27	6	1	1	9	0	17	0	0	0	0	0	0
Wk28	9	0	0	10	0	19	0	0	0	0	0	0
Wk29	17	0	0	27	0	44	0	0	0	0	0	0
Wk30	16	0	0	50	0	66	0	0	0	0	0	0
Wk31	15	0	0	43	0	58	1	0	0	1	0	2
Wk32	9	0	0	21	0	30	0	0	0	1	0	0
Wk33	14	0	0	16	0	30	0	0	0	2	0	0
Wk34	20	0	0	13	0	33	3	0	0	3	0	5
Wk35	6	0	0	7	0	13	1	0	0	0	0	1
Wk36	3	0	0	0	0	3	2	0	0	0	0	2
Wk37	7	0	0	0	0	7	2	0	0	0	0	2
Wk38												
Wk39												
Wk40												
TOTAL TO DATE	163	7	7	205	0	382	16	3	0	7	0	22



SEASON-TO-DATE DISEASE TESTING BY SPECIES				
<i>Species</i>	Rabies	Plague	Tularemia	Hanta
Bat	152	0	0	0
Skunk	3	0	0	0
Raccoon	3	0	0	0
Squirrel	0	2	2	0
Cat	0	2	2	0
Flea	0	1	1	0
Dog	5	0	0	0
Prairie Dog	0	1	1	0
TOTALS	163	6	6	0

SEASON-TO-DATE DISEASE POSITIVES BY SPECIES				
<i>Species</i>	Rabies	Plague	Tularemia	Hanta
Bat	16	0	0	0
Skunk	0	0	0	0
Raccoon	0	0	0	0
Squirrel	0	2	0	0
Cat	0	1	0	0
Flea	0	0	0	0
Dog	0	0	0	0
Prairie Dog	0	0	0	0
TOTALS	16	3	0	0