



TOWN OF BERTHOUD

JUNE 2019 MONTHLY REPORT

JULY 8TH, 2019

West Nile Virus Risk

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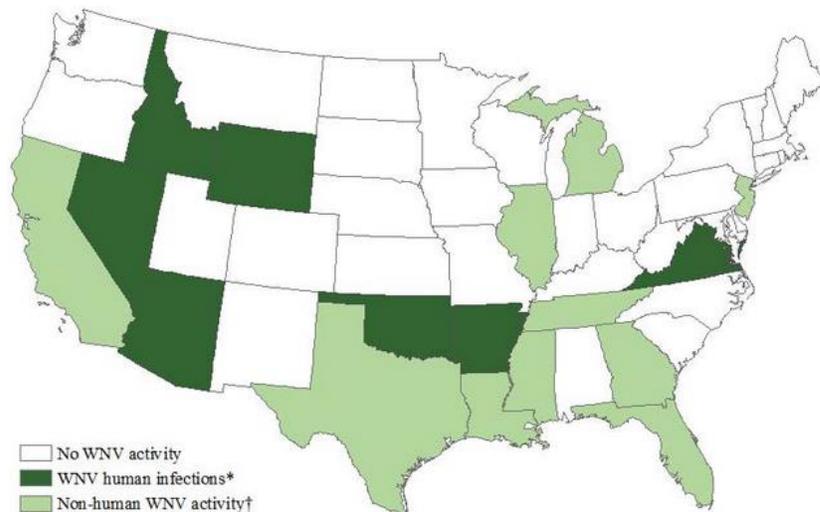
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Both the Colorado Department of Public Health & Environment (CDPHE) and Colorado State University began testing mosquito samples in Disease Week 24 (June 14th). As of July 1st there have been no reports of West Nile virus positive mosquitoes in the state of Colorado.

The Centers for Disease Control and Prevention currently reports human West Nile virus infections in seven states. Non-human West Nile virus activity (mosquitoes, birds or sentinel animals) has been reported in sixteen states. While West Nile virus activity remains relatively low, and we have not documented viral activity in Northern Colorado, we are likely to see increased disease risk as the summer progresses and encourage personal protective measures including draining water from your property, avoiding the outdoors at dawn and dusk, defending yourself by wearing repellent and dressing appropriately.

West Nile Virus Activity by State – United States, 2019 (as of June 25, 2019)



In June 2019 Colorado State University (CSU) tested a total of 62 mosquito samples containing 375 mosquitoes. These samples consisted of 328 *Cx. tarsalis* and 47 *Cx. Papiens* collected from the Fort Collins, Loveland and Berthoud areas.

By comparison, in June 2018 Colorado State University (CSU) tested a total of 227 mosquito samples containing 3,073 mosquitoes. These samples consisted of 2,508 *Cx. tarsalis* and 565 *Cx. Papiens* collected from the Fort Collins, Loveland and Berthoud areas.

Weather

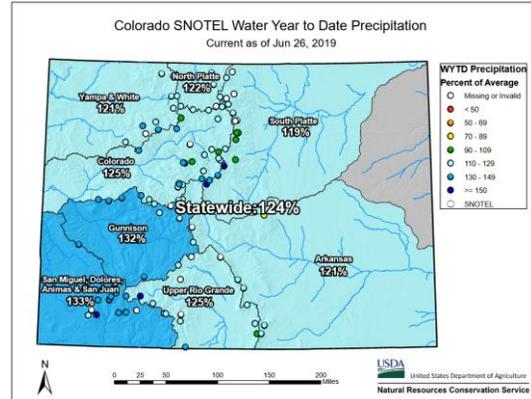
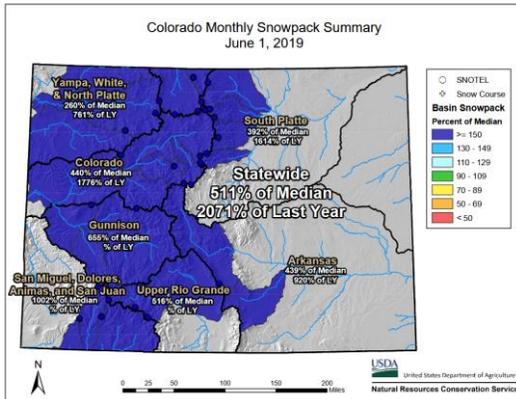
Wear Your Repellent!

Use approved mosquito repellents containing DEET, picaridin or oil of lemon eucalyptus.

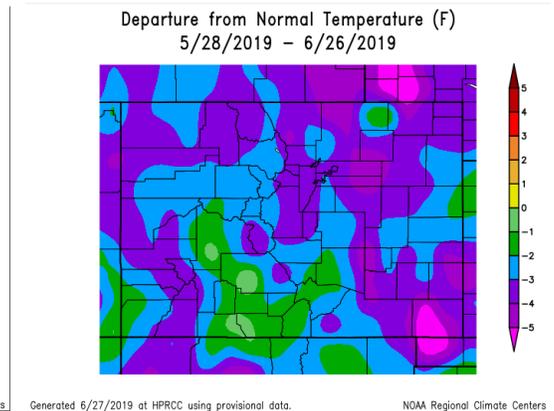
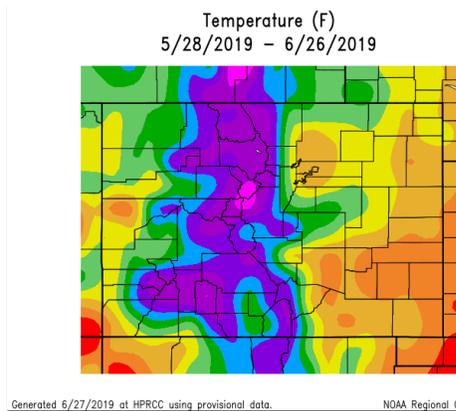
DEET products generally provide the longest protection. The other repellents work but must be applied more frequently.

Follow the product label for correct use. Products with 10 percent or less DEET are recommended for children.

VDCI began field inspections throughout Northern Colorado in May although rain and cooler temperatures persisted late into the spring. Snowpack levels were far above average across most of the state and as of June 1st Colorado was 511% of the median for normal snowpack, with much of the snow still not melted as of July 1st. As of June 1st monthly precipitation in every major water shed was 124% above normal with the South Platte River reaching 119% of its monthly average. *Culex* obtained from larval sites has remained low as a percentage of all mosquitoes collected. In the early season months VDCI field technicians have focused larval site inspections on larger water bodies and mandatory sites known to produce larvae early season.



According to the High Plains Regional Climate Center the average temperature in Larimer County was 64 °F during the month of June. With temperatures lower on average throughout most of the county we did observe lower than average trap counts and larvae samples.



Generated 6/27/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

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Larval Control Operations

VDCI field technicians performed 261 site inspections in the month of June 2019 as part of the Town of Berthoud inspection and larviciding program. Of those 261 site inspections, 167 sites (64.0%) were wet and 39 sites were producing mosquito larvae (23.4% of the wet sites). A total of 23.5 acres were treated with 119 lbs of Vectobac (*Bti*) and 0 gallons of BVA mosquito larviciding oil to prevent these mosquito larvae from emerging as adults.

VDCI field technicians performed 204 site inspections in the month of June 2018 as part of the Town of Berthoud inspection and larviciding program. Of those 204 site inspections, 165 sites (80.9%) were wet and 85 sites were producing mosquito larvae (51.5% of the wet sites). A total of 91.6 acres were treated with 568.2 lbs of Vectobac (*Bti*) and 4.7 gallons of BVA mosquito larviciding oil to prevent these mosquito larvae from emerging as adults.

Mosquito Population Surveillance

In June of 2019, VDCI set weekly traps in Berthoud Park (LC-001), Berthoud North on Bunyan (LC-049), Berthoud West (LC-053) and Berthoud Pointe (LC-054), as well as a new trap Berthoud East (LC-055). We collected a total of 382 mosquitoes. The species composition of mosquito collected included 334 (87.4%) *Aedes spp.*, 27 (7.1%) *Culex spp* and 21 *Culesita spp.* (5.5%). There was an average of 19.1 mosquitoes per trap night and 1.4 *Culex spp.* mosquitoes per trap night collected in Berthoud during June 2019.

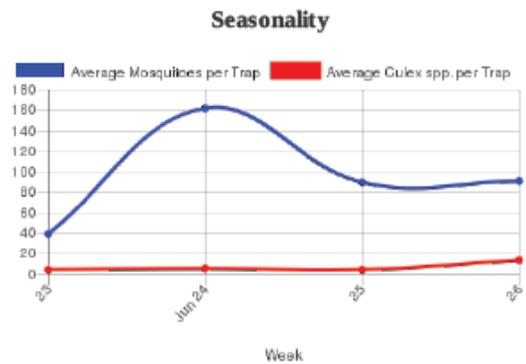
In June of 2018, VDCI set weekly traps in Berthoud Park (LC-001), Berthoud North on Bunyan (LC-049), Berthoud West (LC-053) and Berthoud Pointe (LC-054). We collected a total of 2,411 mosquitoes. The species composition of mosquito collected included 2,014 (84%) *Aedes spp.*, 391 (16%) *Culex spp* and 6 *Culesita spp.* (<2%). There was an average of 121 mosquitoes per trap night and 20 *Culex spp.* mosquitoes per trap night collected in Berthoud during June 2018.

2019 Berthoud Trap Composite Data

Total number of trap/nights set:	20
Total number of mosquitoes collected:	382.0
Average mosquitoes per trap/night:	19.1
Average Culex per trap/night:	1.4

Species collected and abundance:

<i>Aedes dorsalis</i>	47.0	12.3%
<i>Aedes increpitus</i>	11.0	2.9%
<i>Aedes melanimon</i>	12.0	3.1%
<i>Aedes vexans</i>	264.0	69.1%
<i>Culex pipiens</i>	3.0	0.8%
<i>Culex tarsalis</i>	24.0	6.3%
<i>Culiseta inornata</i>	21.0	5.5%



Genus Proportions:

Genus	Number	Percent of Total
<i>Aedes/Ochlerotatus</i>	334	87.4%
<i>Anopheles</i>	0	0.0%
<i>Culex</i>	27	7.1%
<i>Culiseta</i>	21	5.5%
Other	0	0.0%



Adult Mosquito Control Operations

The Town of Berthoud has not allocated funds for adult mosquito control operations in 2019. The primary emphasis of this program is on controlling mosquitoes in the larval stages using biological control products. Decisions regarding adult mosquito control operations will take place based on weekly surveillance data and recommendation by the Larimer County Department of Health and Environment.

Public Relations

VDCI received 0 calls from residents of Berthoud during the month of June.