

CMMCP WEEKLY SURVEILLANCE REPORT



EPI week #31
Jul. 31 – Aug. 6, 2016

Frank Cornine, *Field Biologist*
Curtis Best, *Staff Entomologist*
John Briggs, *Research Intern*
Tim McGlinchy, *Director of Operations*
Tim Deschamps, *Executive Director*

Central Mass. Mosquito Control Project
Weekly Report- 7/31/16-8/6/16
EPI Week #31

Cumulative Surveillance Summary

Target Species	<i>Ae. vex</i>	<i>Cq. per</i>	<i>Cs. mel</i>	<i>Oc. can</i>	<i>Culex</i>	All Species
No. Pools	7	383	26	91	355	1078
Total Specimens	54	46475	553	4758	7739	64725
No. Pools WNV +	0	0	0	0	0	0
No. Pools EEE +	0	0	0	0	0	0

Weather Summary (Northborough, MA): The weather for this particular week averaged 70.67°F with a recorded high temperature of 88.30°F and a recorded low temperature of only 53.80°F. There was 0.71 inches of precipitation observed this week. Compared to the previous week, it was approximately 7.00°F cooler on average, and rained 0.51 inches more. There has been 0.64 inches of rain accumulated in August, after 1.62 inches for the month of July.

CMMCP Mosquito Summary*-

Target Species Δ From Δ From Predominant Trap Site(s)
Last Week Last Year

<i>Aedes vexans</i>	+1100%	+1100%	Chelmsford, Webster
<i>Coquillettidia perturbans</i>	+19.00%	+1391%	Webster, Berlin
<i>Culiseta melanura</i>	+575.0%	-28.95%	Tewksbury, Millville
<i>Ochlerotatus canadensis</i>	+3.900%	+7900%	Webster, Leominster
<i>Culex</i> Species	-37.40%	+189.1%	Berlin, Holliston
All Species	+10.02%	+1088%	Webster, Berlin

The predominant mosquito for the week was *Coquillettidia perturbans*
followed by *Culex pipiens/restuans*.

Enhanced Surveillance for *Aedes albopictus* - Ovitrap Collections

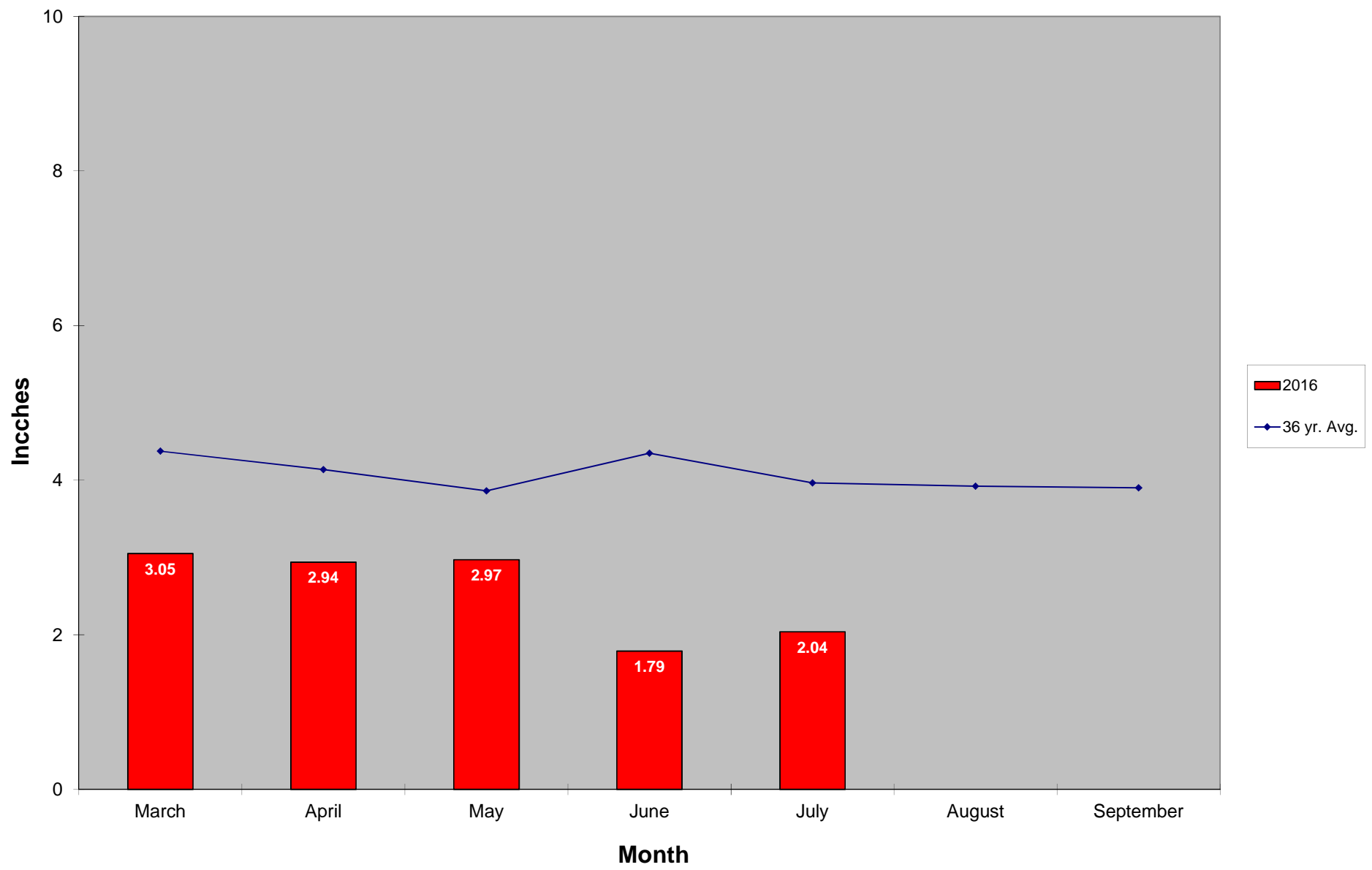
	# Ovitrap	# Egg Papers	# Eggs
EPI Week #22	15	7	0
EPI Week #23	-	-	-
EPI Week #24	5	2	49
EPI Week #25	15	6	93
EPI Week #26	17	17	19
EPI Week #27	25	19	1180
EPI Week #28	25	25	1020
EPI Week #29	10	7	62
EPI Week #30	15	12	632
EPI Week #31	15	10	524
2016 Totals	142	105	3579

The temperature for EPI week 31 averaged approximately 7.00 degrees cooler than the previous week, with only almost 0.71 inches of precipitation observed. At historical surveillance trap sites, the overall collection numbers increased by 10.02% over EPI week 30, primarily due to an increase of *Coquillettidia perturbans*. The only target species to experience a decrease for EPI week 31 was *Culex pipiens/restuans*. The long-term surveillance locations showed a significant overall increase when compared to the 2015 season, due again primarily because of the change in the *Cq. perturbans* population. This species was once again the most abundant target mosquito in the CMMCP service area, with *Cx. pipiens/restuans* the second most abundant mosquito. *Cq. perturbans* will likely remain the predominant species for EPI week 32. Ten egg papers were collected from fifteen CMMCP ovitraps this week. These produced 524 eggs which will help monitor for the presence of *Aedes albopictus* in central Massachusetts.

For the year we received 160% more service requests than average; 13,870 requests compared to the 13 year average of 8,648. Service requests decreased 31.3% from the previous week; 586 in Epi week 30 compared to 446 in Epi week 31.

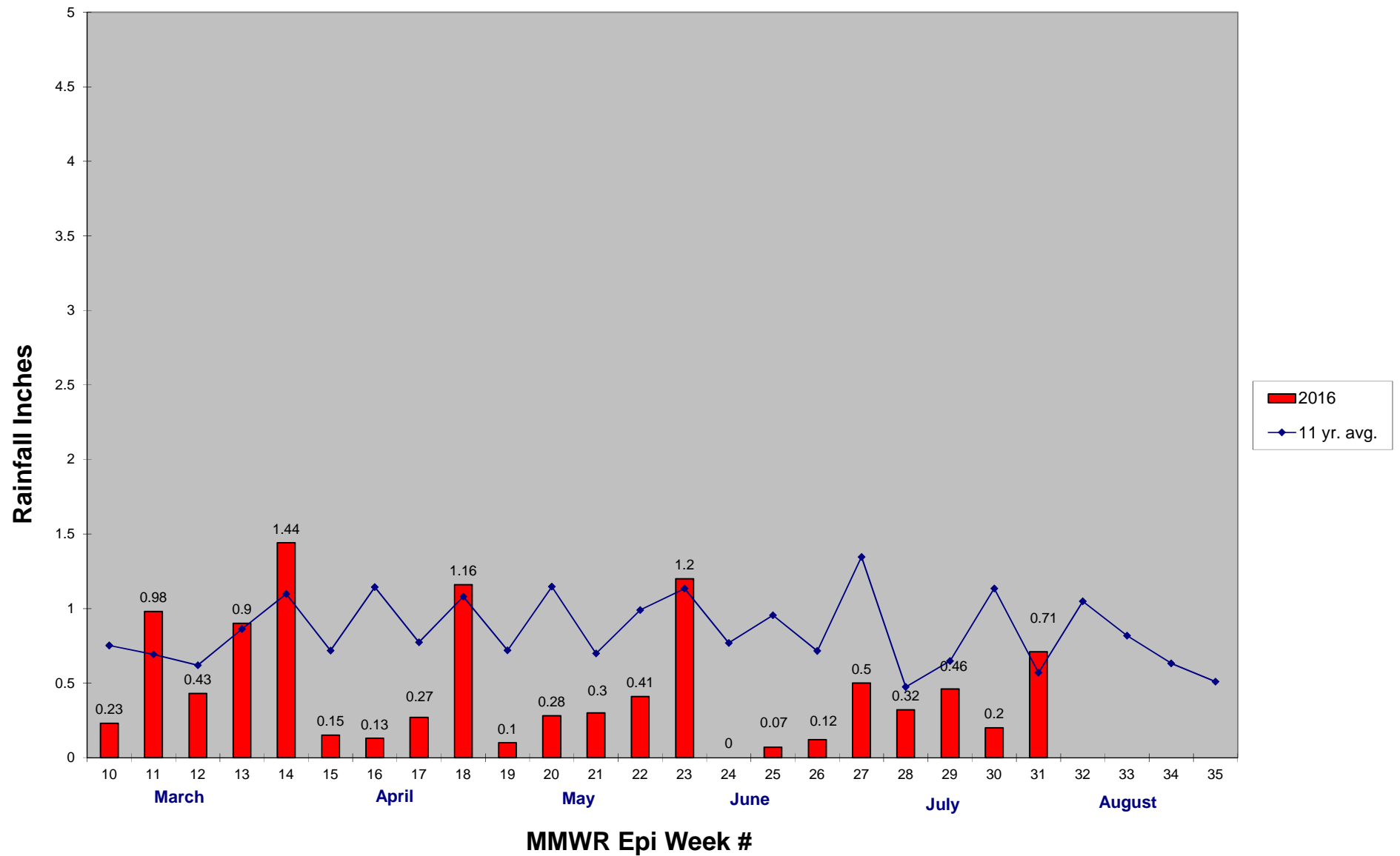
Standard catch basin treatments continue in all member towns. With scattered reports of rain, some heavy, in our region, we have been pushing the message through social media and other outlets to “Dump and Drain” to minimize larval populations that use these habitats to develop.

2016 Mass. Rainfall Data vs. 36 Year Average*



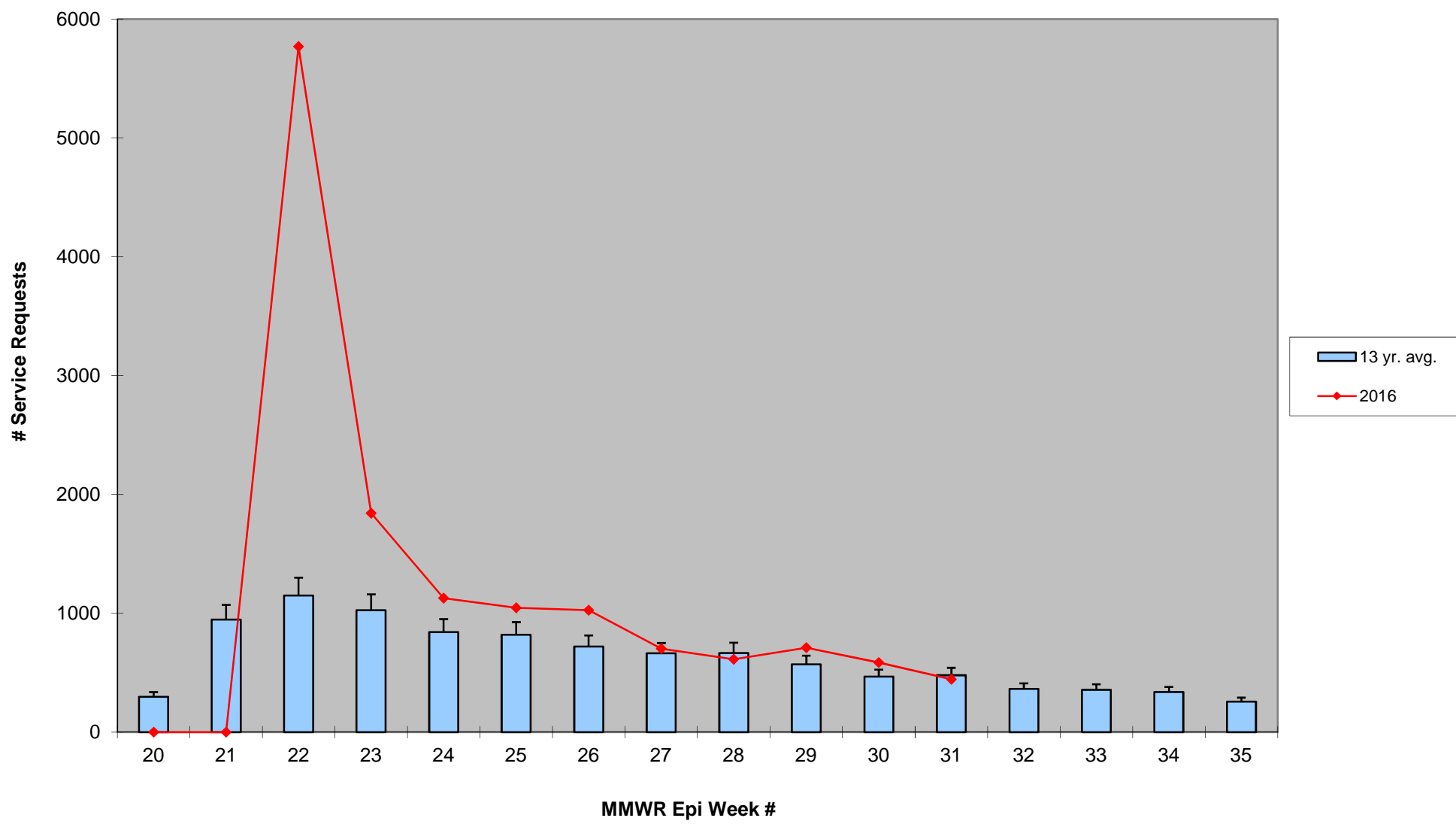
*source: <http://www.nrcc.cornell.edu/regional/tables/tables.html>

2016 CMMCP Weekly Rainfall vs. 11 Year Average*



*source: CMMCP weather station Northborough, MA

ULV Service Request History Comparison 2003-2016



2016 Rainfall vs. Requests

