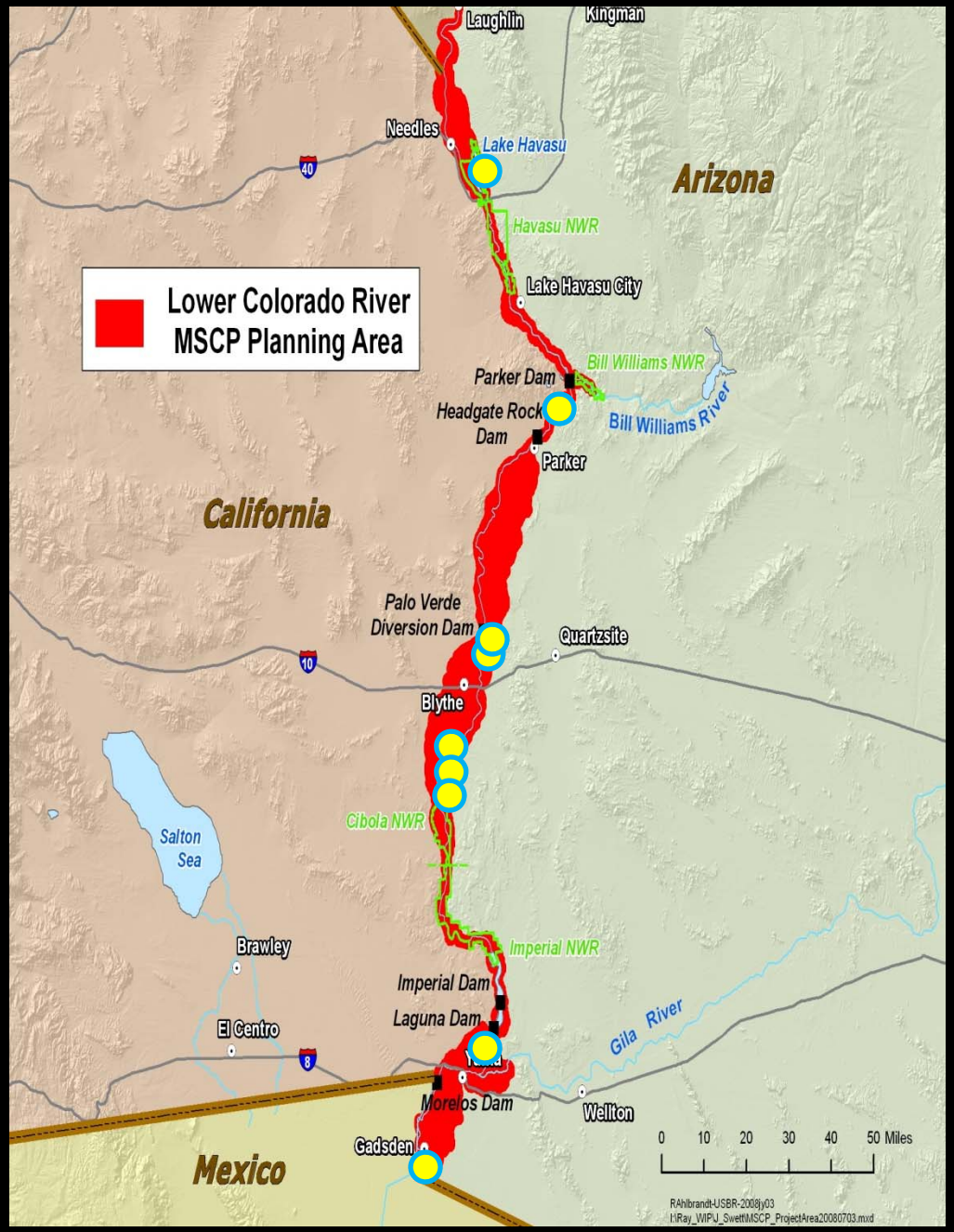
Lower Colorado River Multi-Species Conservation Program

Post Development Bat Monitoring - 2013 Acoustic Monitoring Results


Lower Colorado River
MSCP Planning Area
Laughlin
Kingman
Needles
Lake Havasu
Arizona
Havasu NWR
Lake Havasu City
Bill Williams NWR
Parker Dam
Headgate Rock Dam
Bill Williams River
Parker
California
Palo Verde Diversion Dam
Quartzsite
Blythe
Salton Sea
Cibola NWR
Imperial NWR
Brawley
Imperial Dam
Laguna Dam
El Centro
Gila River
Morelos Dam
Wellton
Gadsden
Mexico
0 10 20 30 40 50 Miles
RAhlbrandt-USBR-2008jy03
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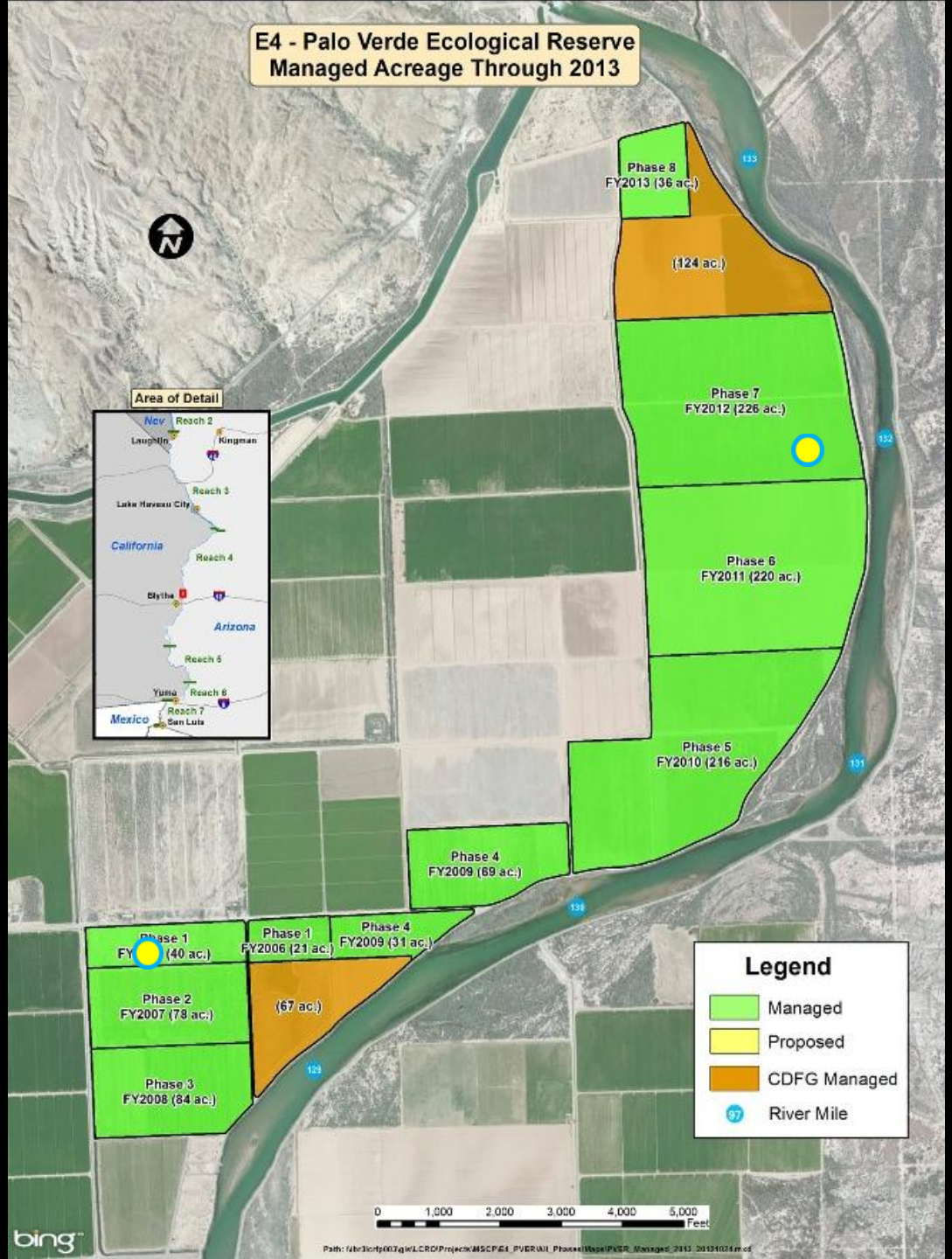
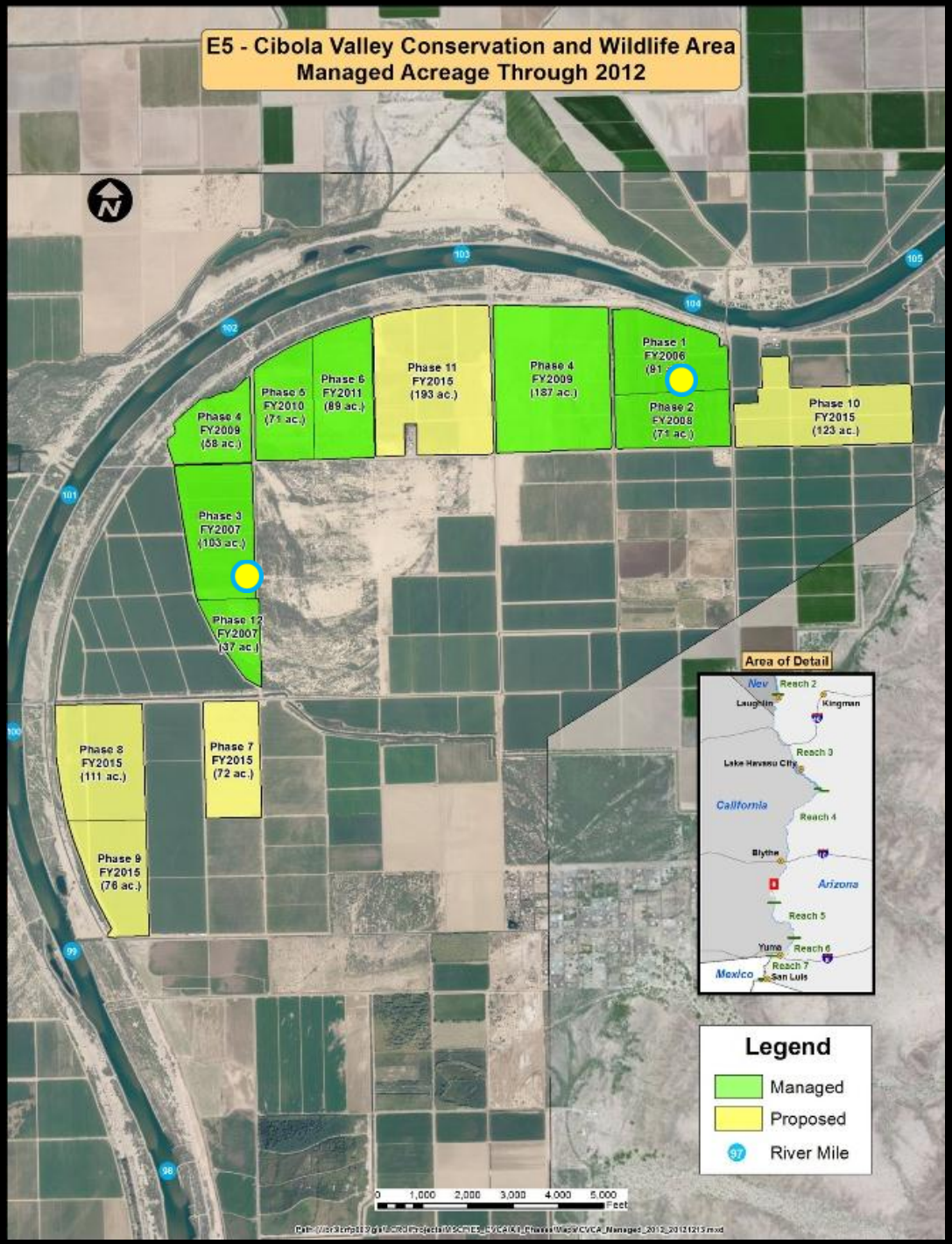

E4 - Palo Verde Ecological Reserve
Managed Acreage Through 2013
Phase 8
FY2013 (36 ac.)
(124 ac.)
Phase 7
FY2012 (226 ac.)
Phase 6
FY2011 (220 ac.)
Phase 5
FY2010 (216 ac.)
Phase 4
FY2009 (69 ac.)
Phase 1
FY (40 ac.)
Phase 1
FY2006 (21 ac.)
Phase 4
FY2009 (31 ac.)
(67 ac.)
Phase 2
FY2007 (78 ac.)
Phase 3
FY2008 (84 ac.)
Area of Detail
Nev
Reach 2
Laughlin
Kingman
Reach 3
Lake Havasu City
California
Reach 4
Blythe
Arizona
Reach 5
Yuma
Reach 6
Reach 7
Mexico
San Luis
Legend
Managed
Proposed
CDFG Managed
River Mile
0 1,000 2,000 3,000 4,000 5,000
Feet
bing

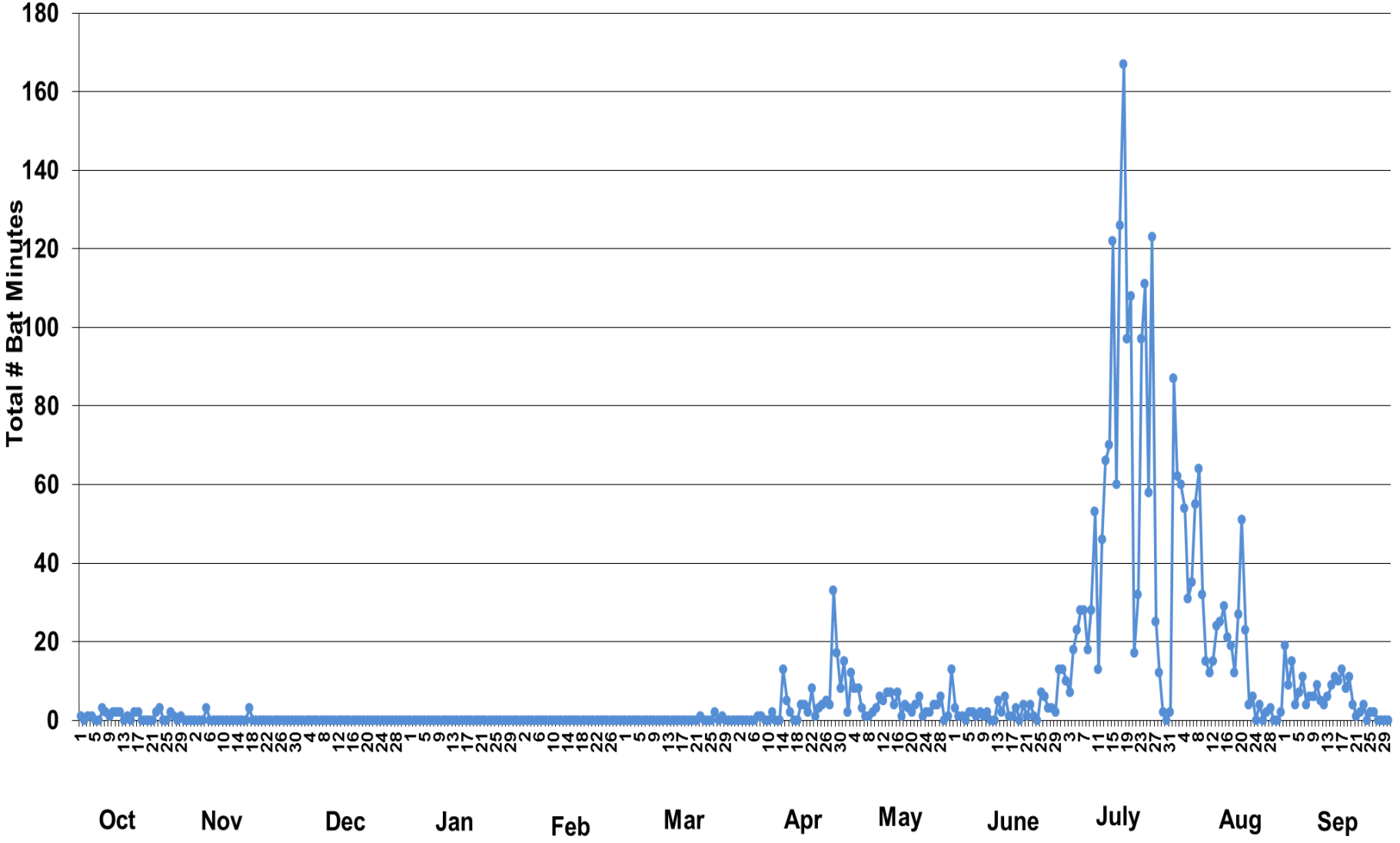

E5 - Cibola Valley Conservation and Wildlife Area
Managed Acreage Through 2012
N
103
105
104
102
101
100
99
98
Phase 1
FY2006
(91
Phase 2
FY2008
(71 ac.)
Phase 10
FY2015
(123 ac.)
Phase 4
FY2009
(187 ac.)
Phase 11
FY2015
(193 ac.)
Phase 6
FY2011
(89 ac.)
Phase 5
FY2010
(71 ac.)
Phase 4
FY2009
(58 ac.)
Phase 3
FY2007
(103 ac.)
Phase 12
FY2007
(37 ac.)
Phase 8
FY2015
(111 ac.)
Phase 7
FY2015
(72 ac.)
Phase 9
FY2015
(76 ac.)
Area of Detail
Nev
Reach 2
Laughlin
Kingman
Reach 3
Lake Havasu City
California
Reach 4
Blythe
Arizona
Reach 5
Yuma
Reach 6
Reach 7
San Luis
Mexico
Legend
Managed
Proposed
River Mile
0 1,000 2,000 3,000 4,000 5,000
Feet

Strongholds

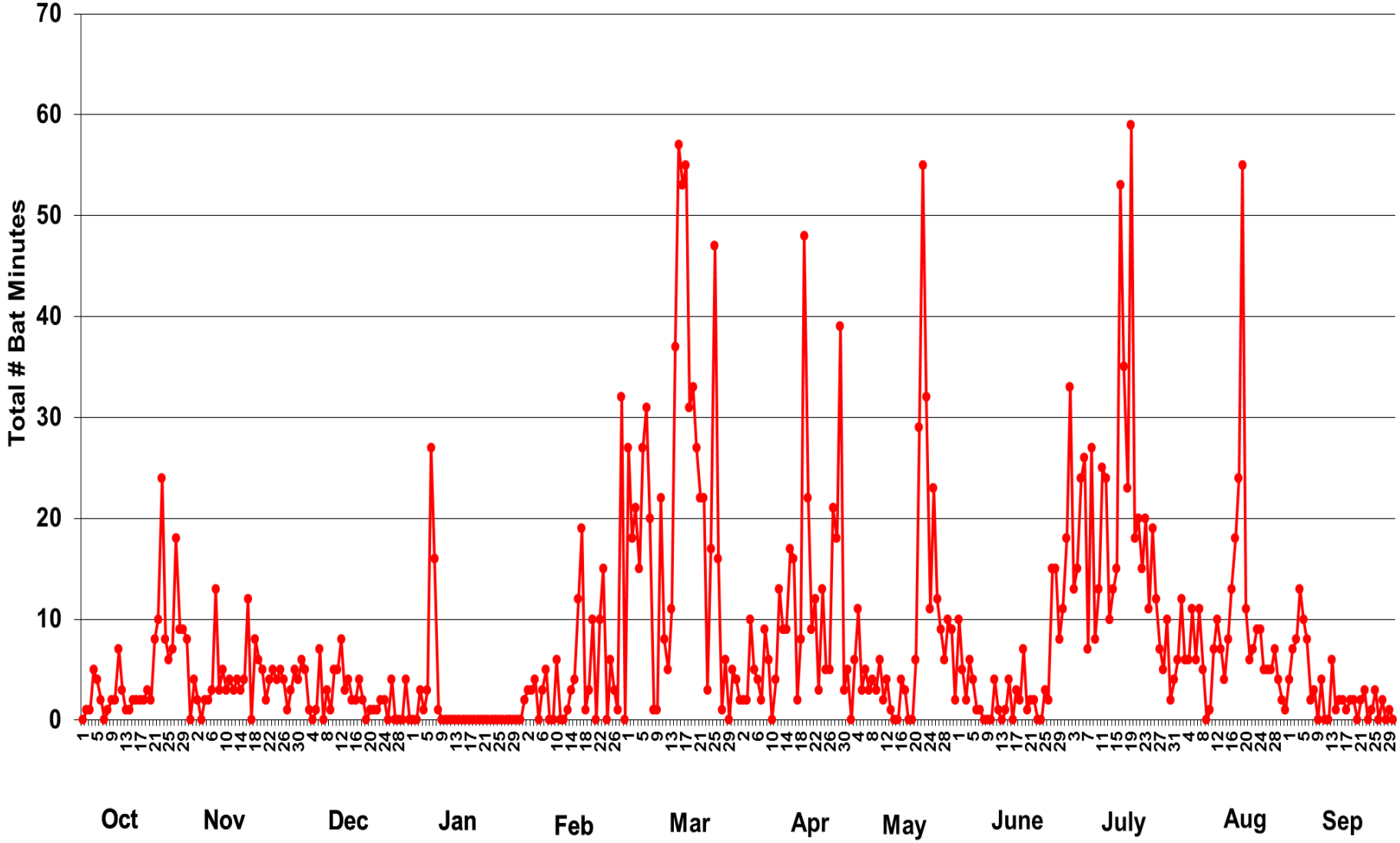
Newly Planted Habitats

Whispering Bats

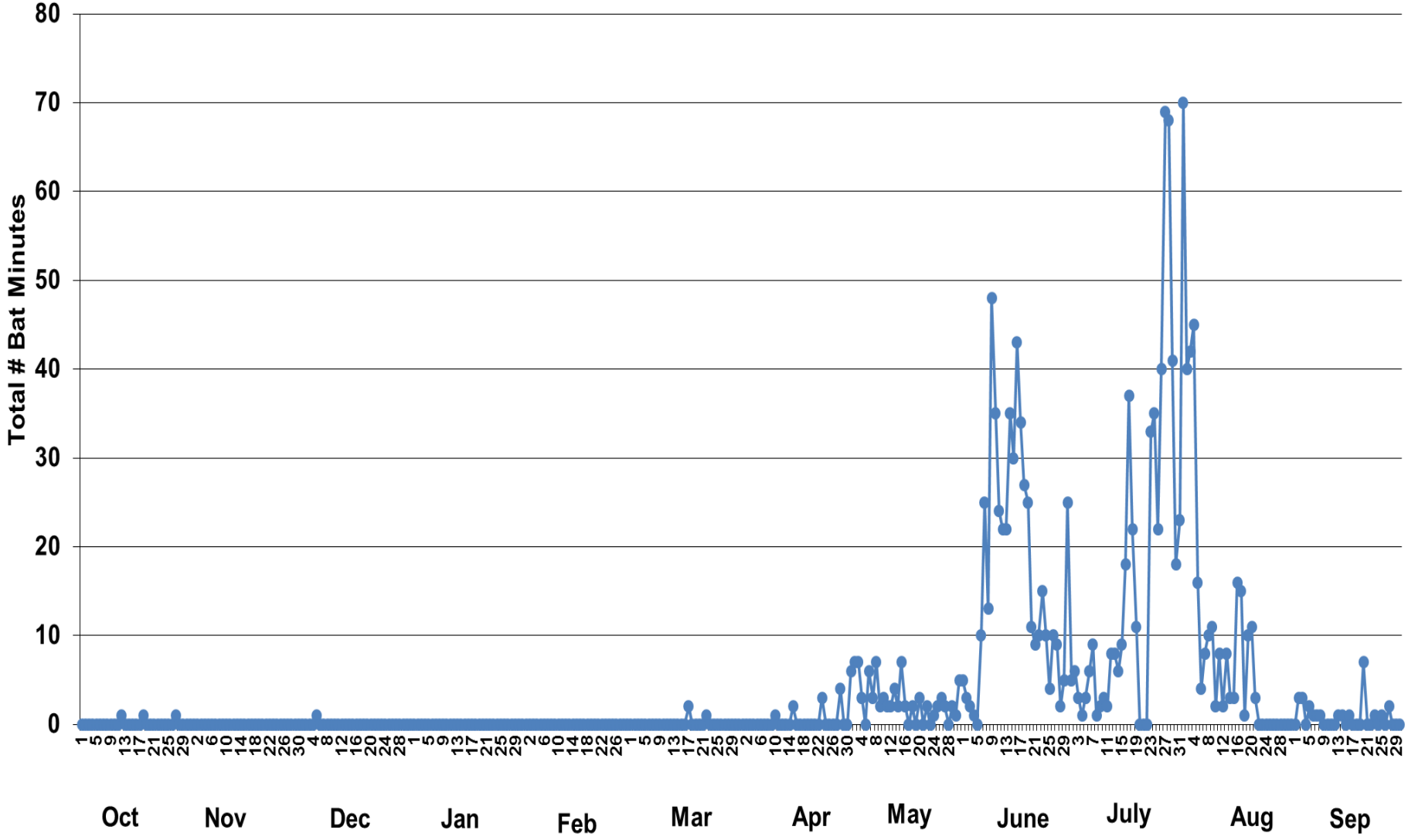
CVCA1 Monitoring Station 2013
Western Yellow Bat



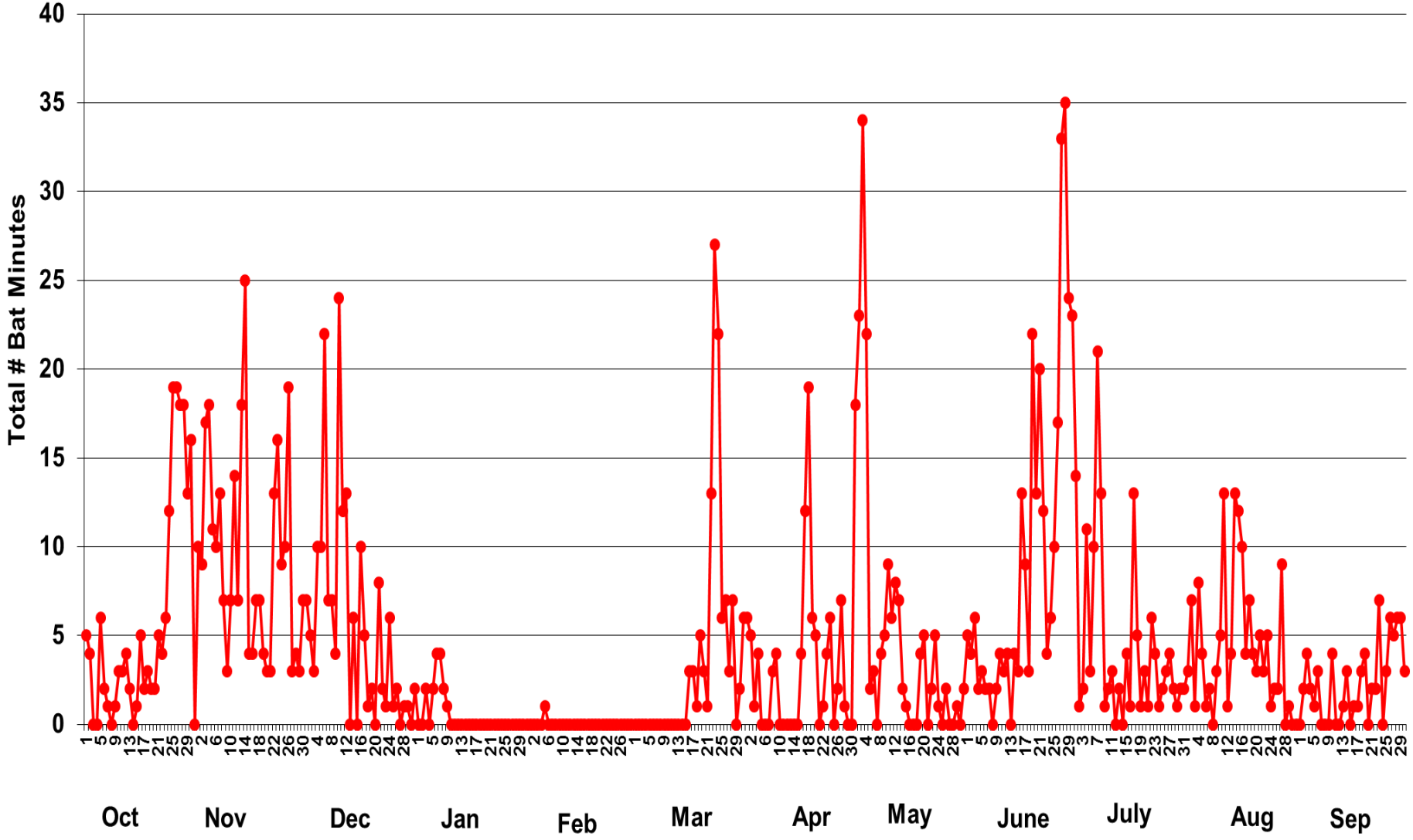
CVCA1 Monitoring Station 2013
Western Red Bat

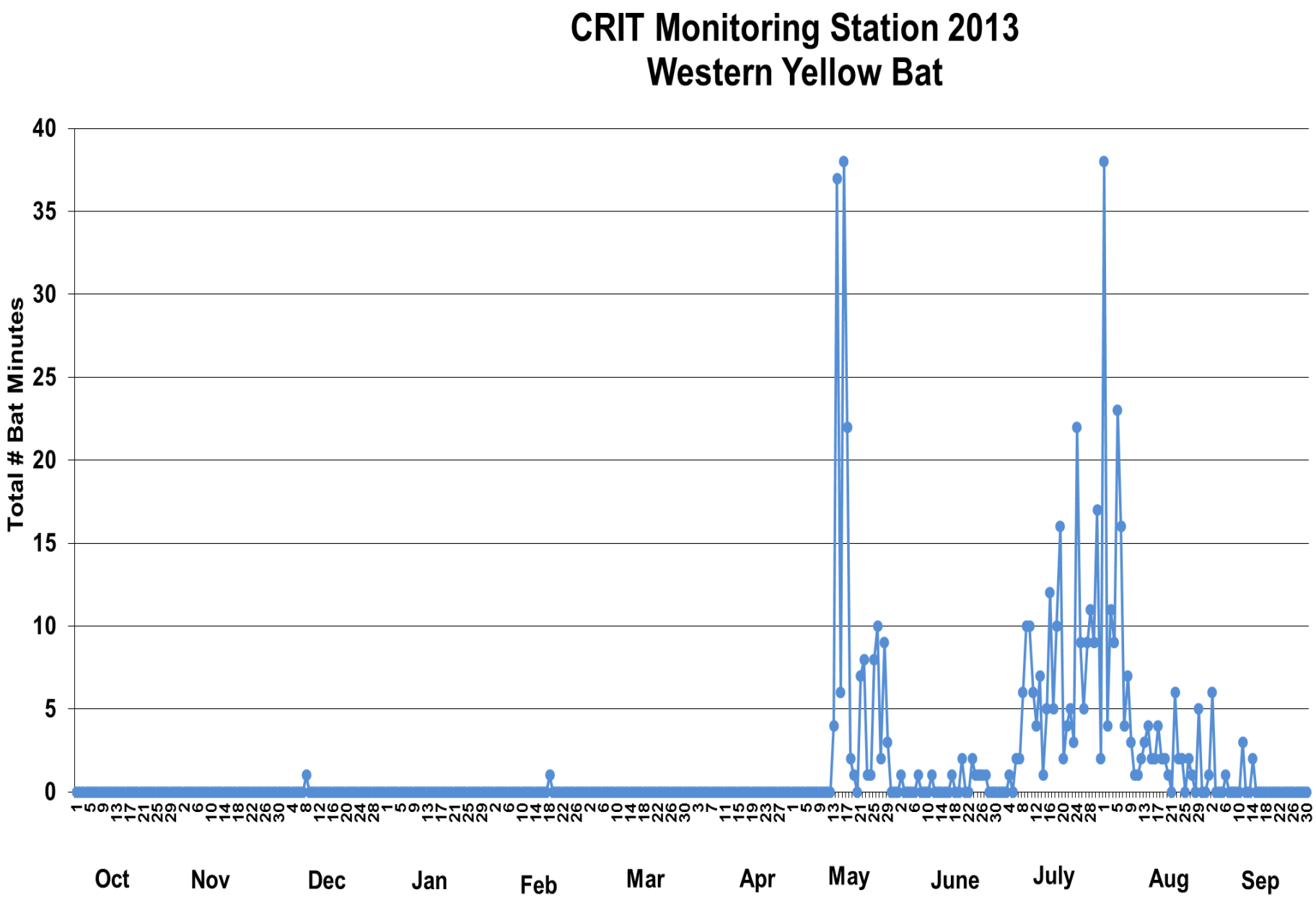


Pver1 Monitoring Station 2013
Western Yellow Bat

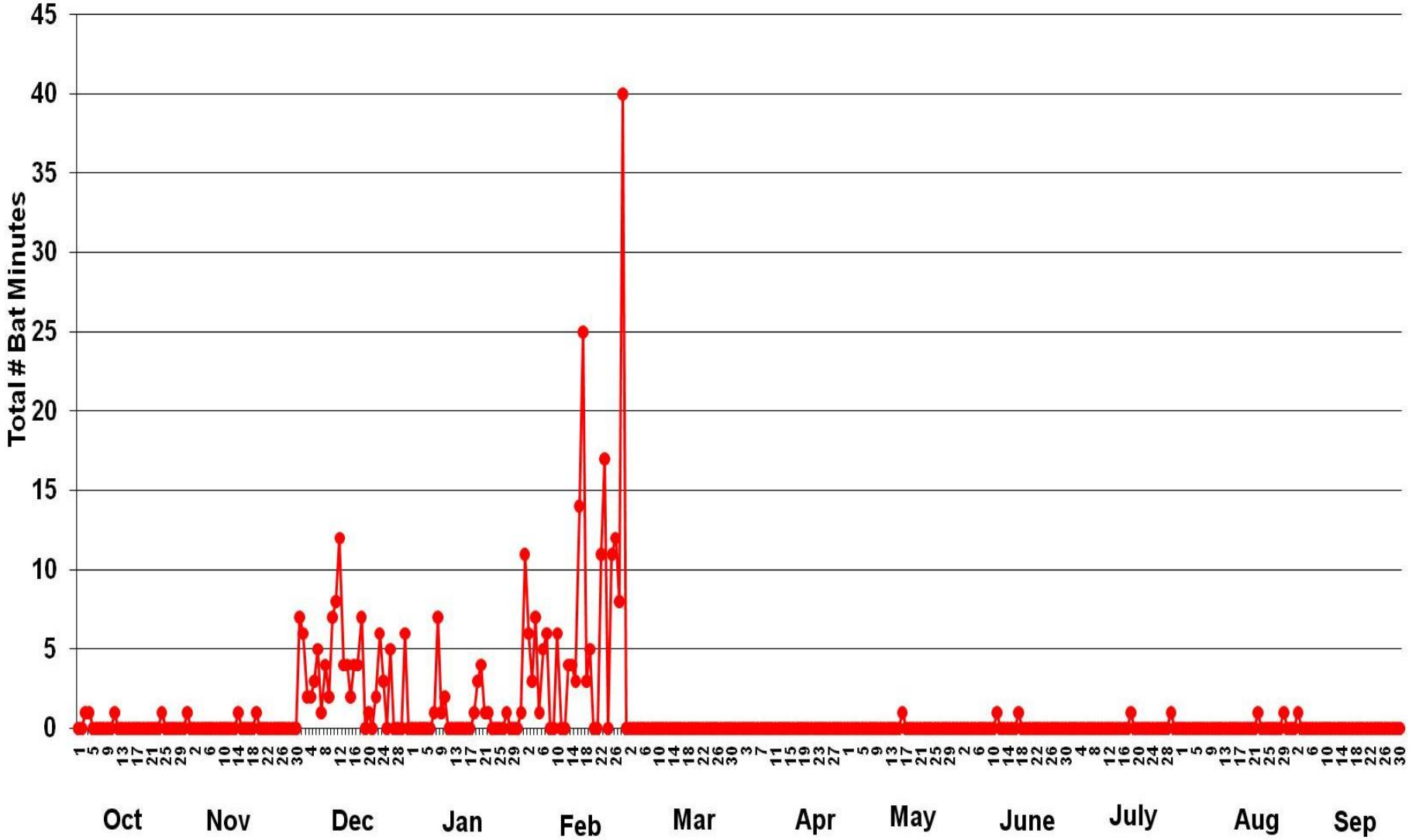


Pver1 Monitoring Station 2013
Western Red Bat

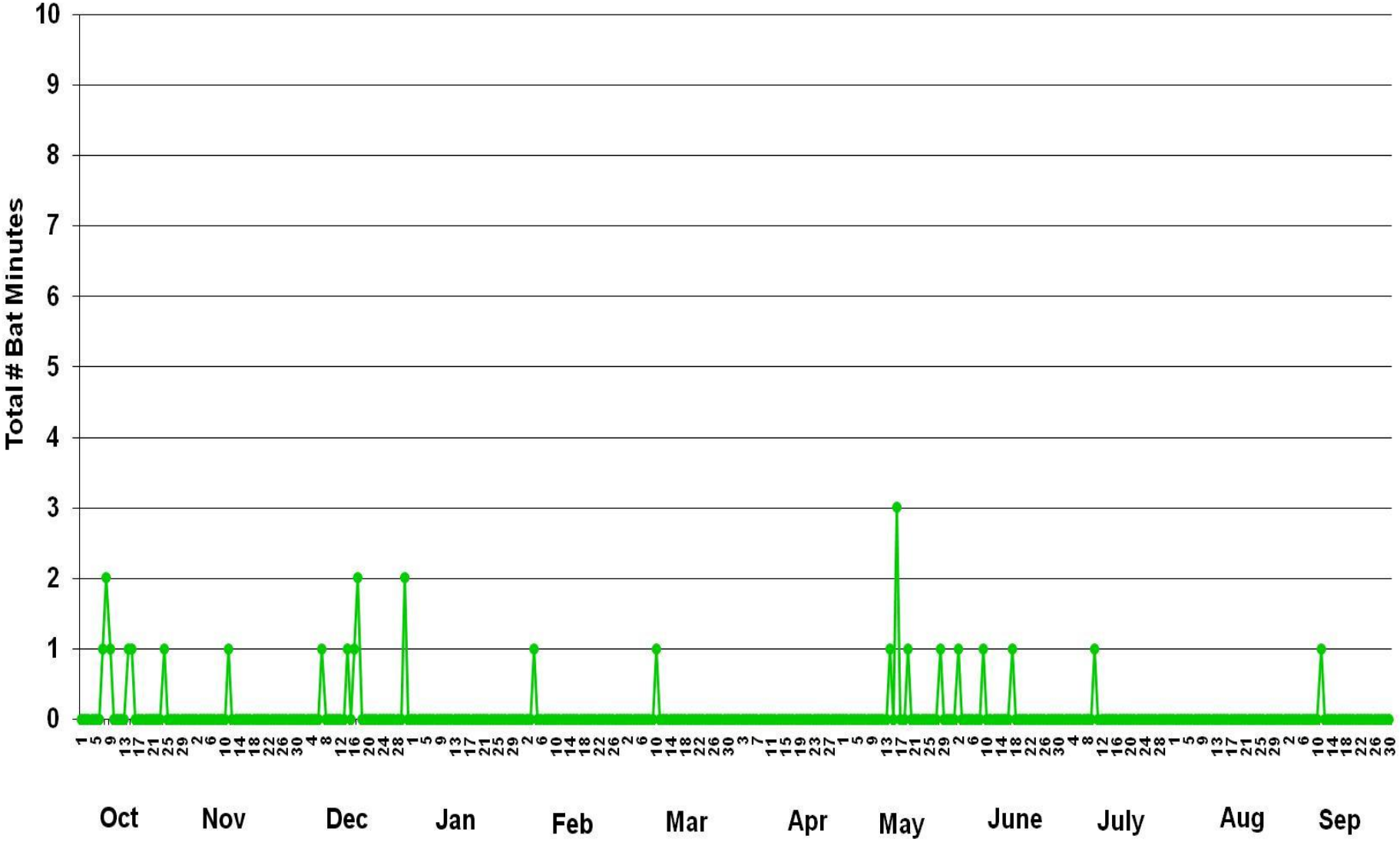



CRIT Monitoring Station 2013
Western Yellow Bat
Total # Bat Minutes
40
35
30
25
20
15
10
5
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
June
July
Aug
Sep

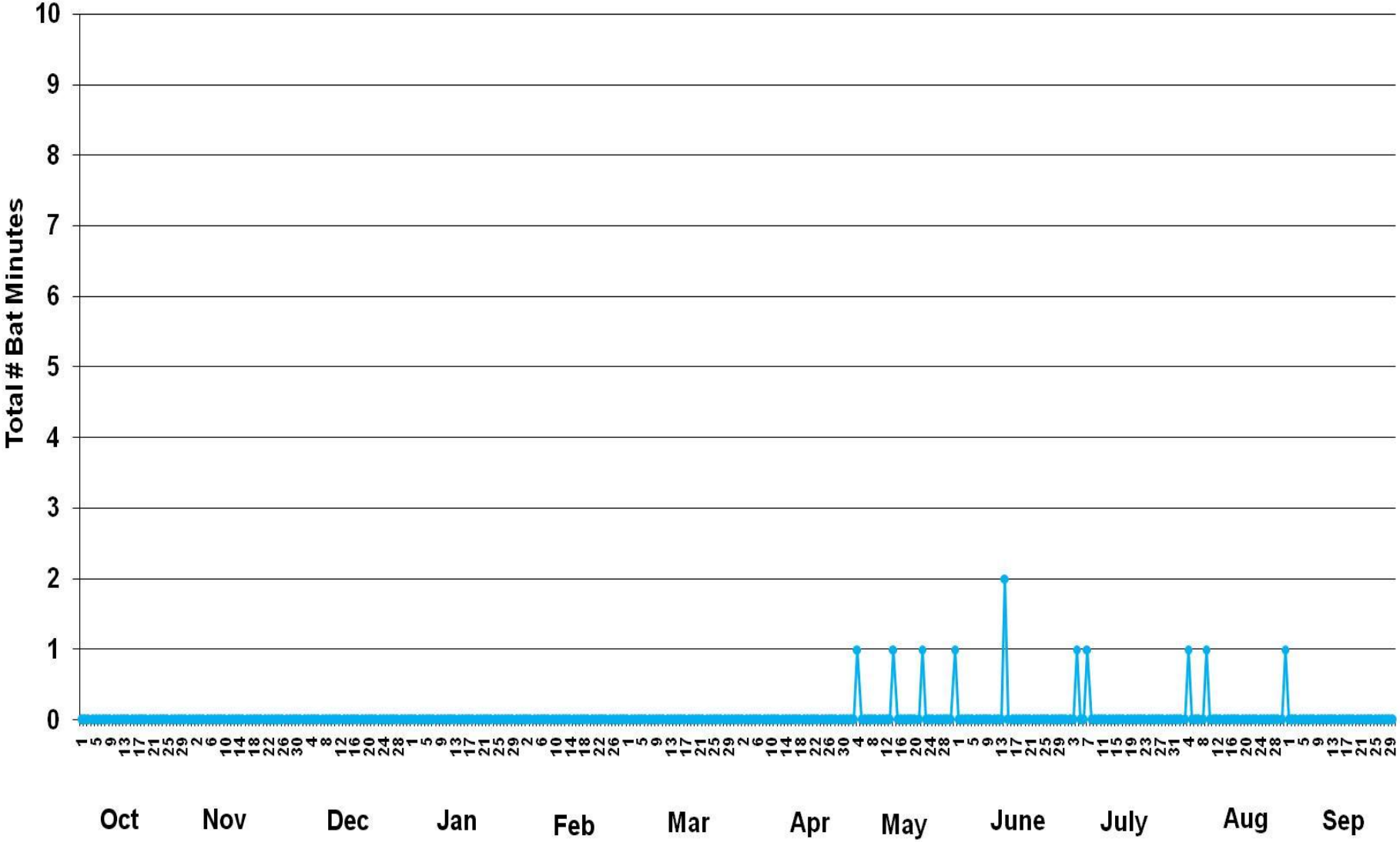
CRIT Monitoring Station 2013
Western Red Bat



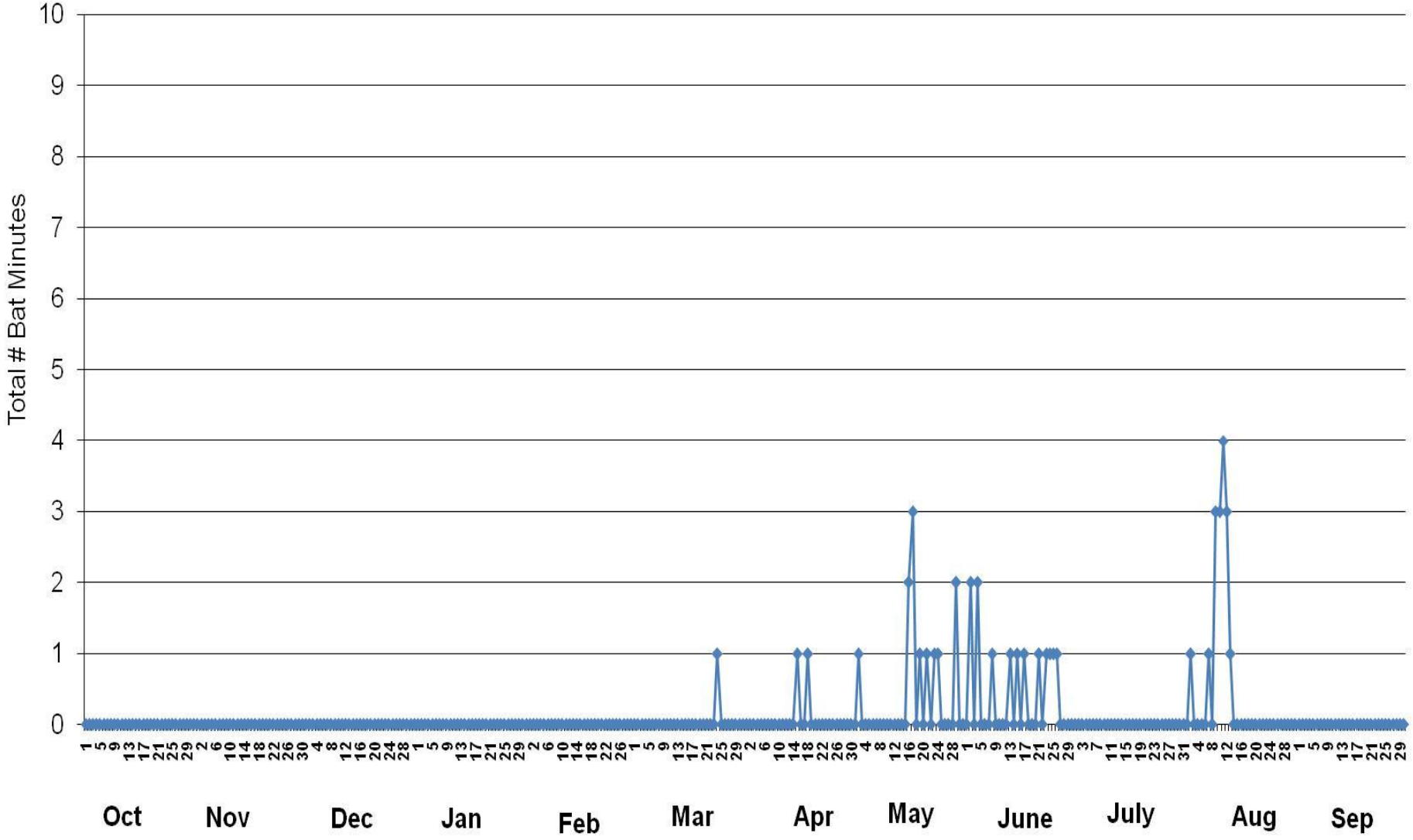
CRIT Monitoring Station 2013
California Leaf-nosed Bat



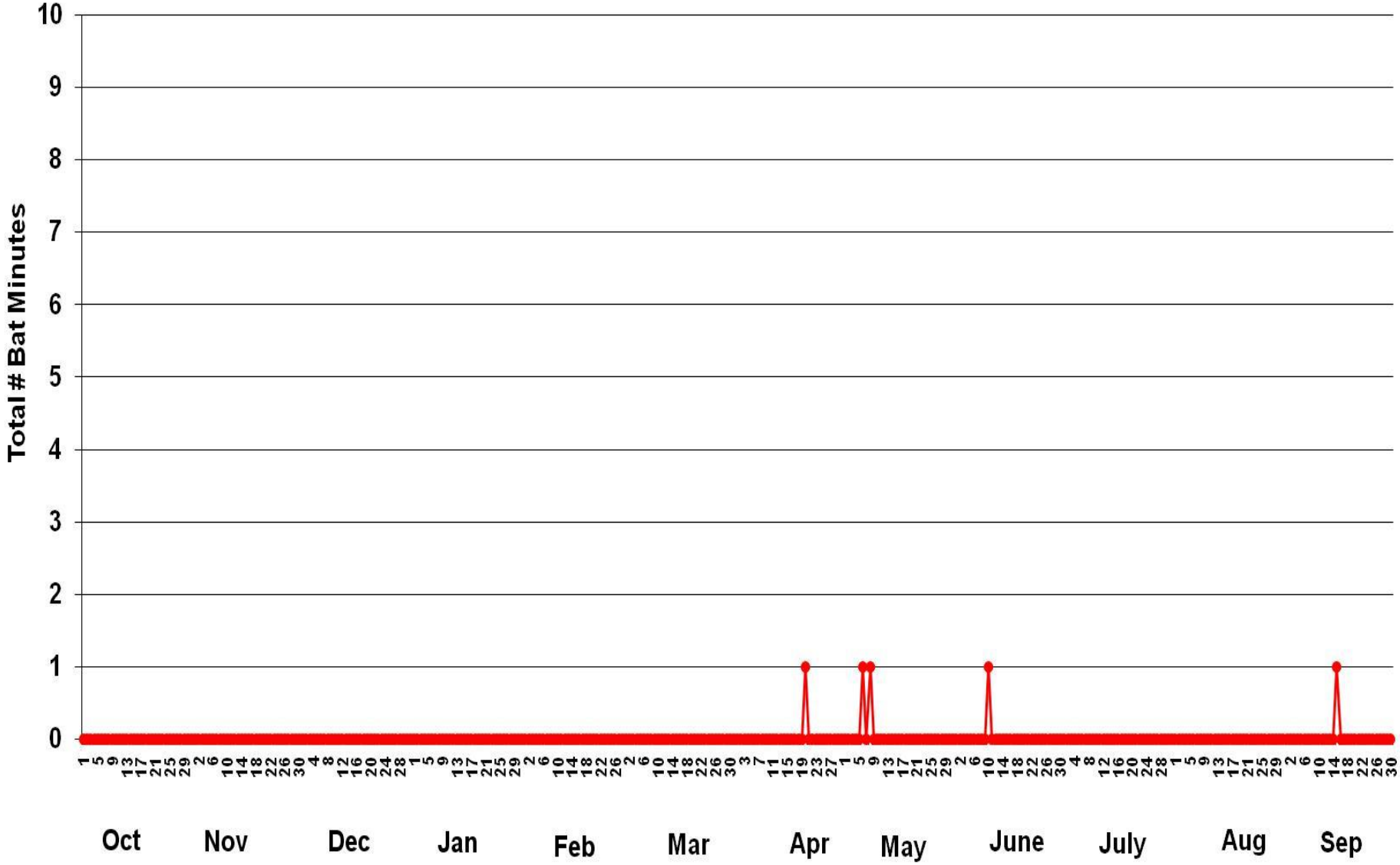
CVCA1 Monitoring Station 2013
Townsend's Big-Eared Bat



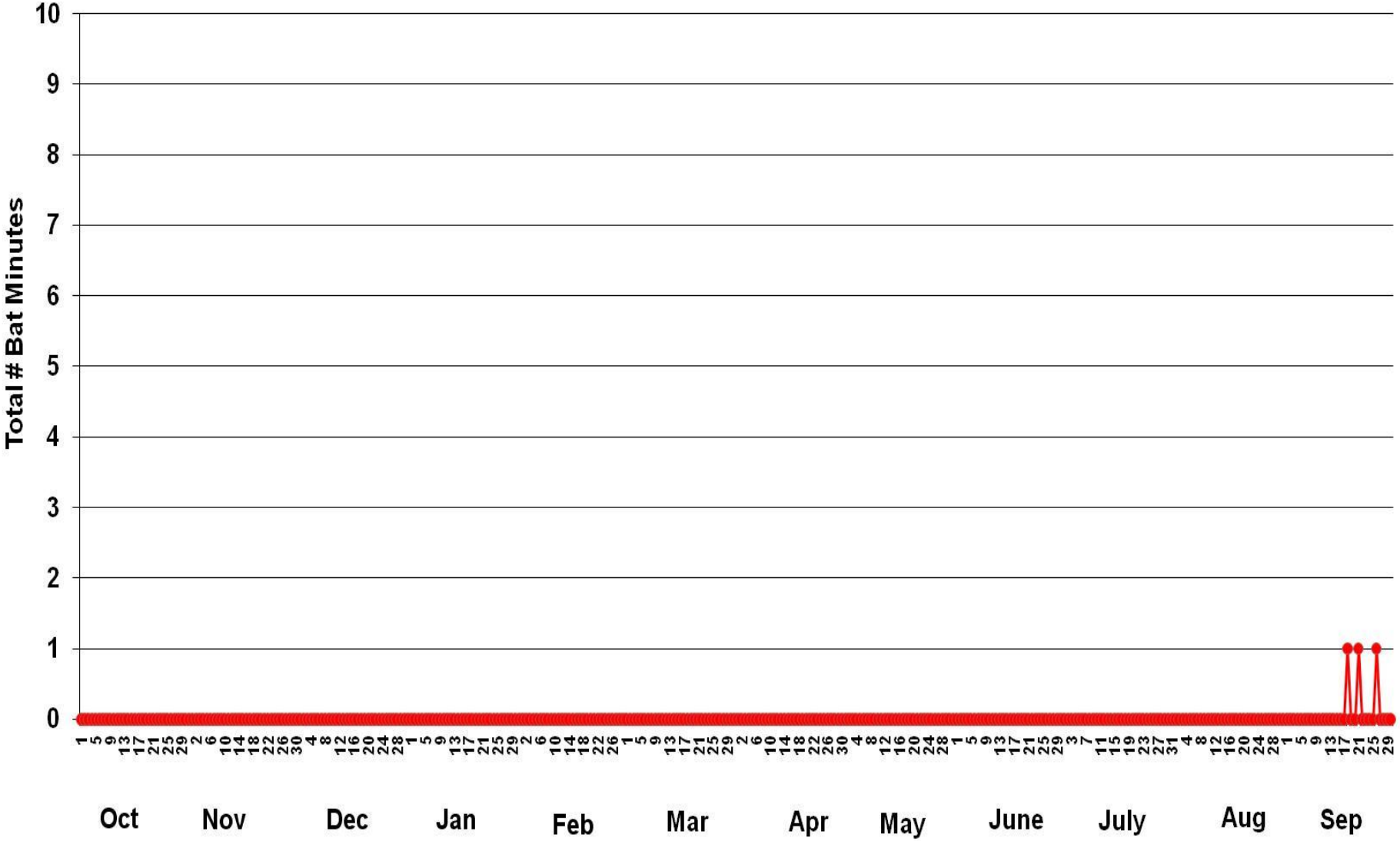
Pver2 Monitoring Station 2013
Western Yellow Bat



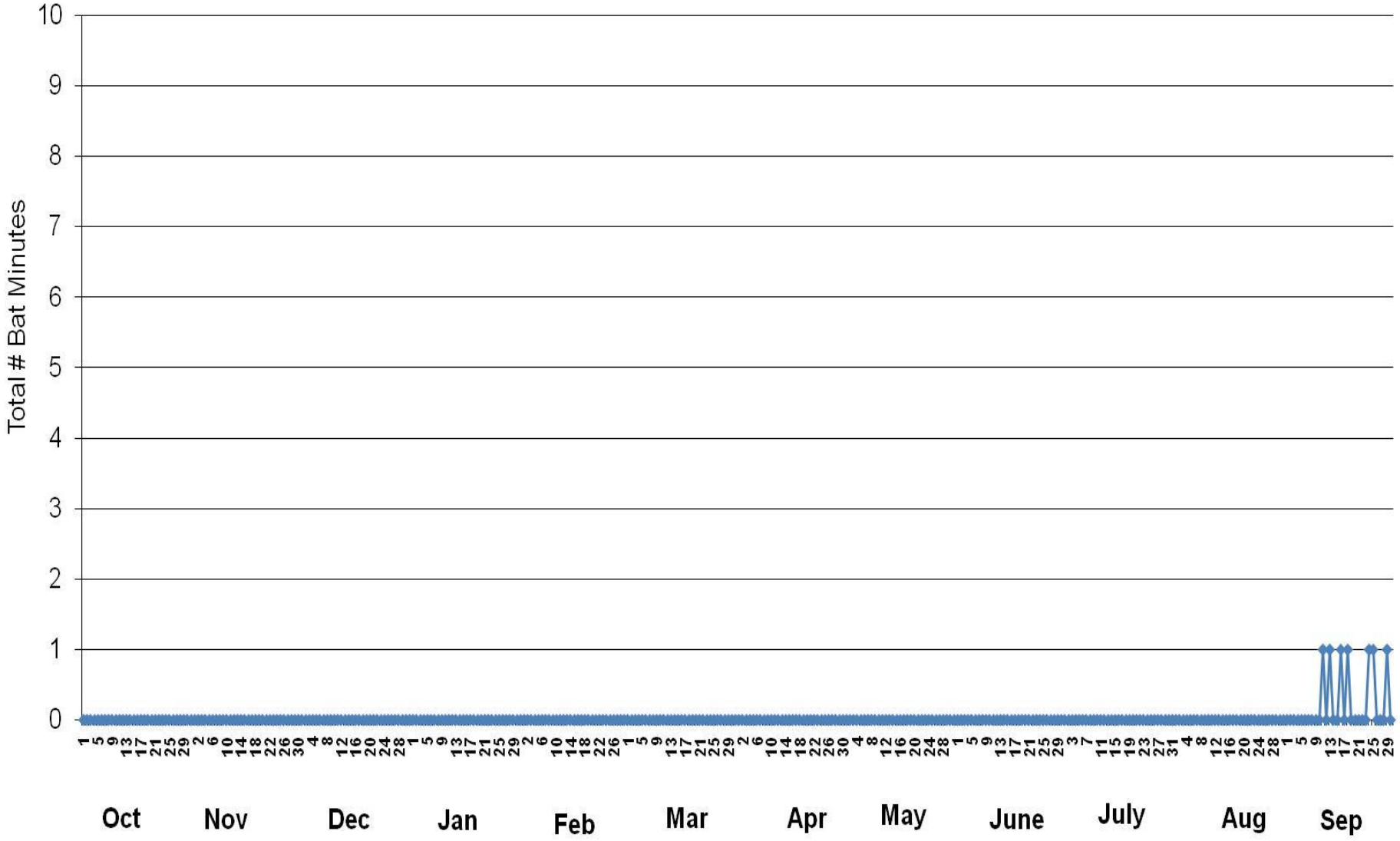
Hunter's Hole Monitoring Station 2013
Western Red Bat



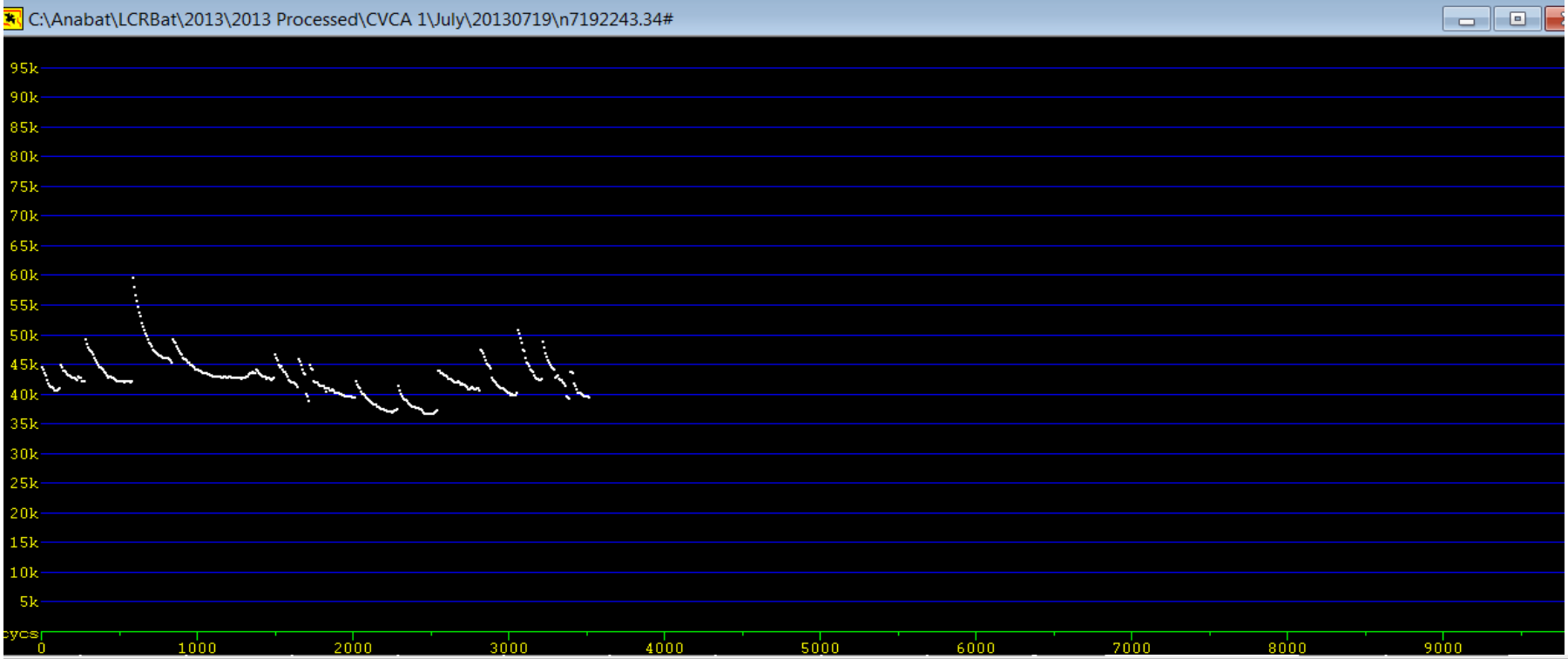
YEWE Monitoring Station 2013
Western Red Bat



YEWE Monitoring Station 2013
Western Yellow Bat



Commuters or foragers?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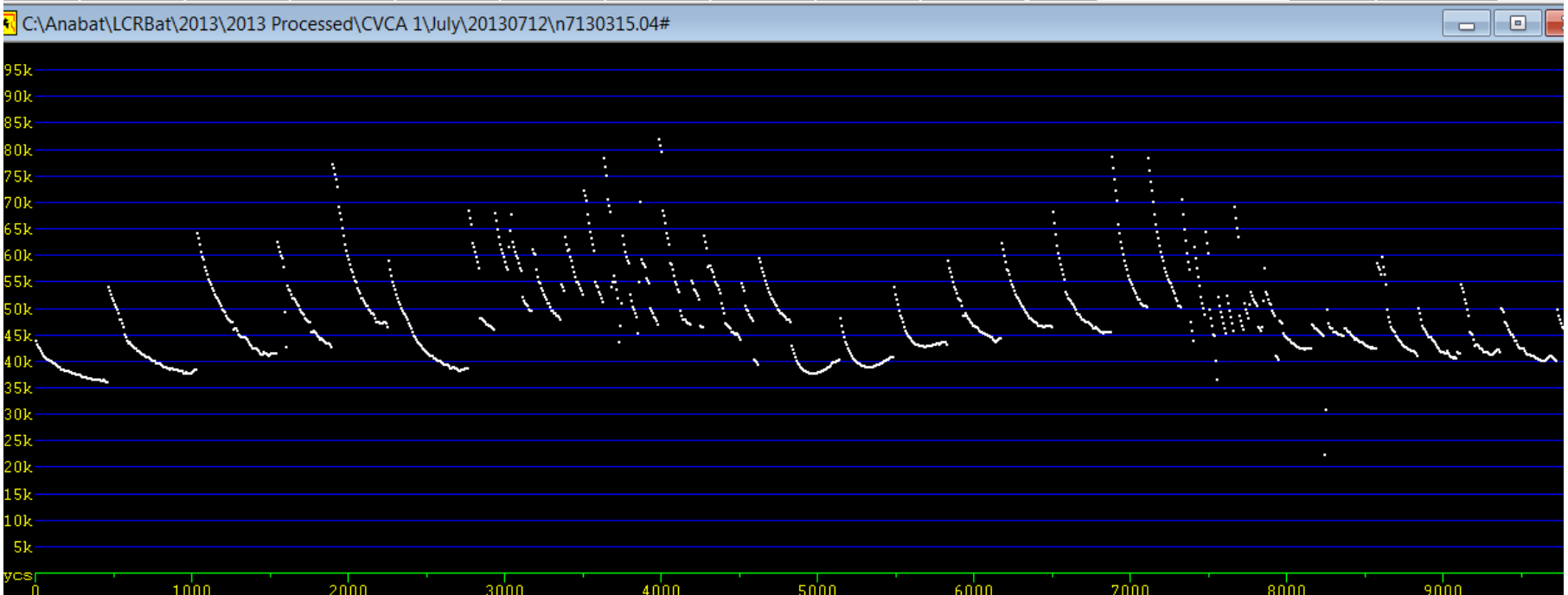
90k
85k
80k
75k
70k
65k
60k
55k
50k
45k
40k
35k
30k
25k
20k
15k
10k
5k
cycs
0
1000
2000
3000
4000
5000
6000
7000
8000
9000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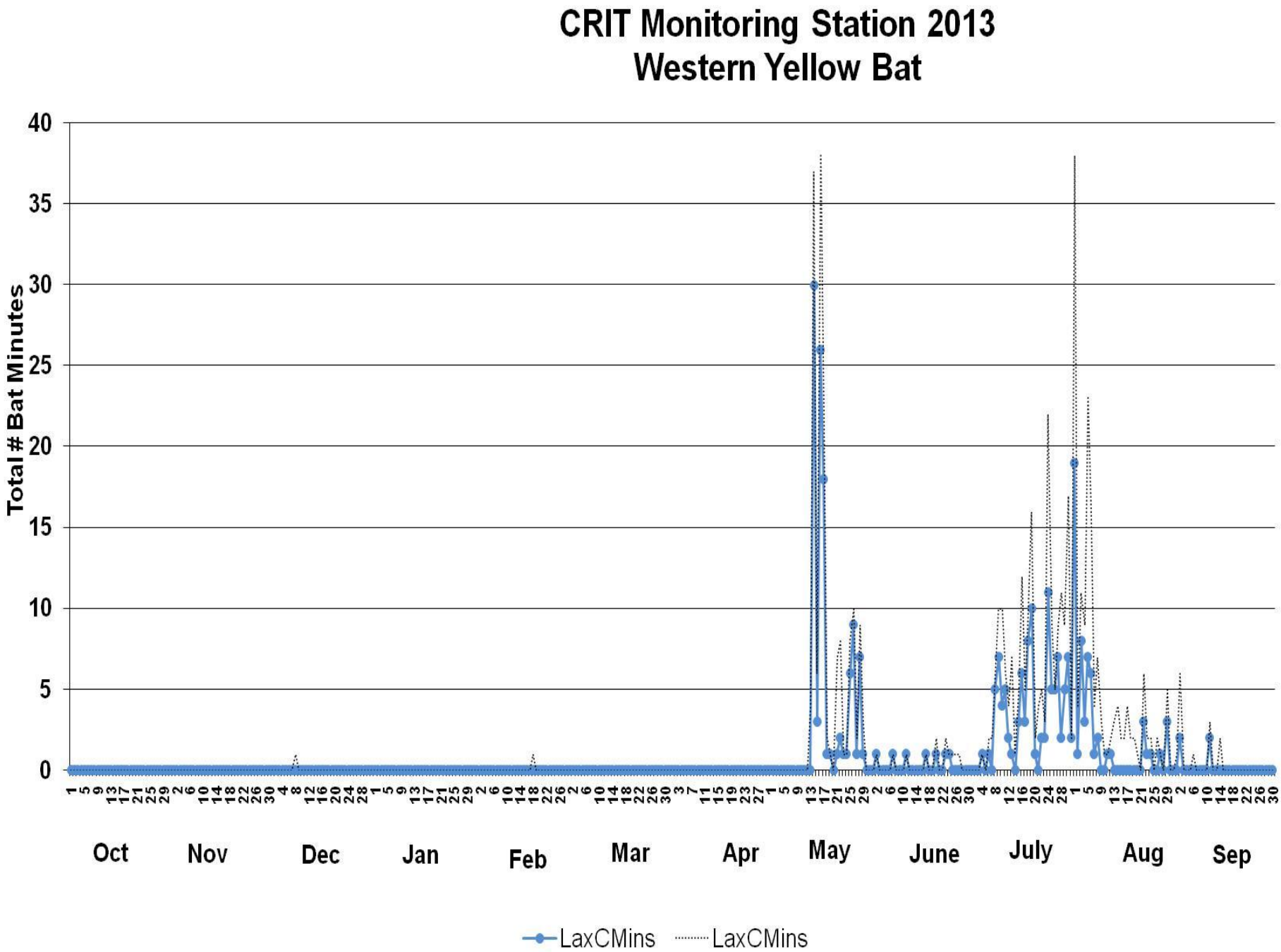
95k
90k
85k
80k
75k
70k
65k
60k
55k
50k
45k
40k
35k
30k
25k
20k
15k
10k
5k
cycs
0
1000
2000
3000
4000
5000
6000
7000
8000
9000


CRIT Monitoring Station 2013
Western Yellow Bat
Total # Bat Minutes
40
35
30
25
20
15
10
5
0
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
June
July
Aug
Sep
LaxCMins
LaxCMins

Statistical Analyses

Bat Station Plans