




Common Ohio Pond Damselflies - Dancers, Bluets, Forktails

Argia, Enallagma, Ischnura

Odo-Con-18

Dancers, Bluets, Forktails
Pond Damselflies
Coenagrionidae
Looking at 2017 survey



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- These Damselflies (Dancers, Forktails, Bluets) are some of my favorites
 - They are misnamed as Damselflies – they would more appropriately be *Demonflies* or *Midge's Bane*
 - They are voracious predators
 - They are pervasive in small to moderate sized aquatic environments
 - some are riverine
 - some are niche organisms
 - several are amongst our most widespread Odonates
 - They are very precise fliers - they glean - and land!

Not discussing Spreadwings, Jewelwings, Rubyspots, Damselfs, Sprites






Major groups of Ohio Pond Damselflies


- 3 Genera
- 23 species observed in 2017
(21 of the 23 in 2017)

- **Dancers - *Argia***, 818 Observations, 7 sp *
- **Bluets - *Enallagma***, 966 Observations, 12 sp
- **Forktails - *Ischnura***, 779 Observations, 4 sp



Blue-fronted Dancer	213
Blue-ringed Dancer	116
Blue-tipped Dancer	98
Dusky Dancer	68
Powdered Dancer	71
Seepage Dancer	35
Violet Dancer	217
Citrine Forktail	45
Eastern Forktail	421
Fragile Forktail	296
Lilypad Forktail	17

Azure Bluet	81
Double-striped Bluet	176
Familiar Bluet	181
Northern Bluet	1
Orange Bluet	175
Rainbow Bluet	7
Skimming Bluet	132
Stream Bluet	115
Tule Bluet	20
Turquoise Bluet	5
Vesper Bluet	31
Westfall's Slender Bluet	42



Historically, 26 species, or an additional 3 species, have been recorded in Ohio more than twice for these *Enallagma*:

- Hagen's Bluet – *E hageni* (62 - 2015) *
- Marsh Bluet – *E ebrium* (56 - 2015)
- Boreal Bluet – *E boreale* (41 - 1995)



E ebrium and *E boreale* are State-listed as Threatened species



There are 4 species that have only a few Ohio records:

- Furtive Forktail – *I prognata* (2 – Marion Co, 1959)
- River Bluet – *E anna* (2 - Hancock Co, 2016)
- Atlantic Bluet – *E doubledayi* (1 – Franklin Co, 1897)
- Rambur's Forktail – *I ramburii* (1 – Summit Co, 2016)

Except for River (we think), the others are accidental



So, $23 + 3 + 4$:

That gets us up to the recorded **30 species**
in these genera.



What do we need to know?

○ Morphology

- Head – eyes, eyespots, bar
- Wings – venation, stigma, length
- Thorax – shoulder-stripe, pigmentation
- Abdomen - pigmentation
 - End bits - ovipositor, claspers

○ Habit

- These are needle-like predators of flying insects
- They typically fly low to the ground,
in and out of vegetation
- Commonly near water

Head



Wings



Wings



Thorax



Abdomen



Abdomen



Abdomen



Abdomen





*Let's look at **easy** things – Males*

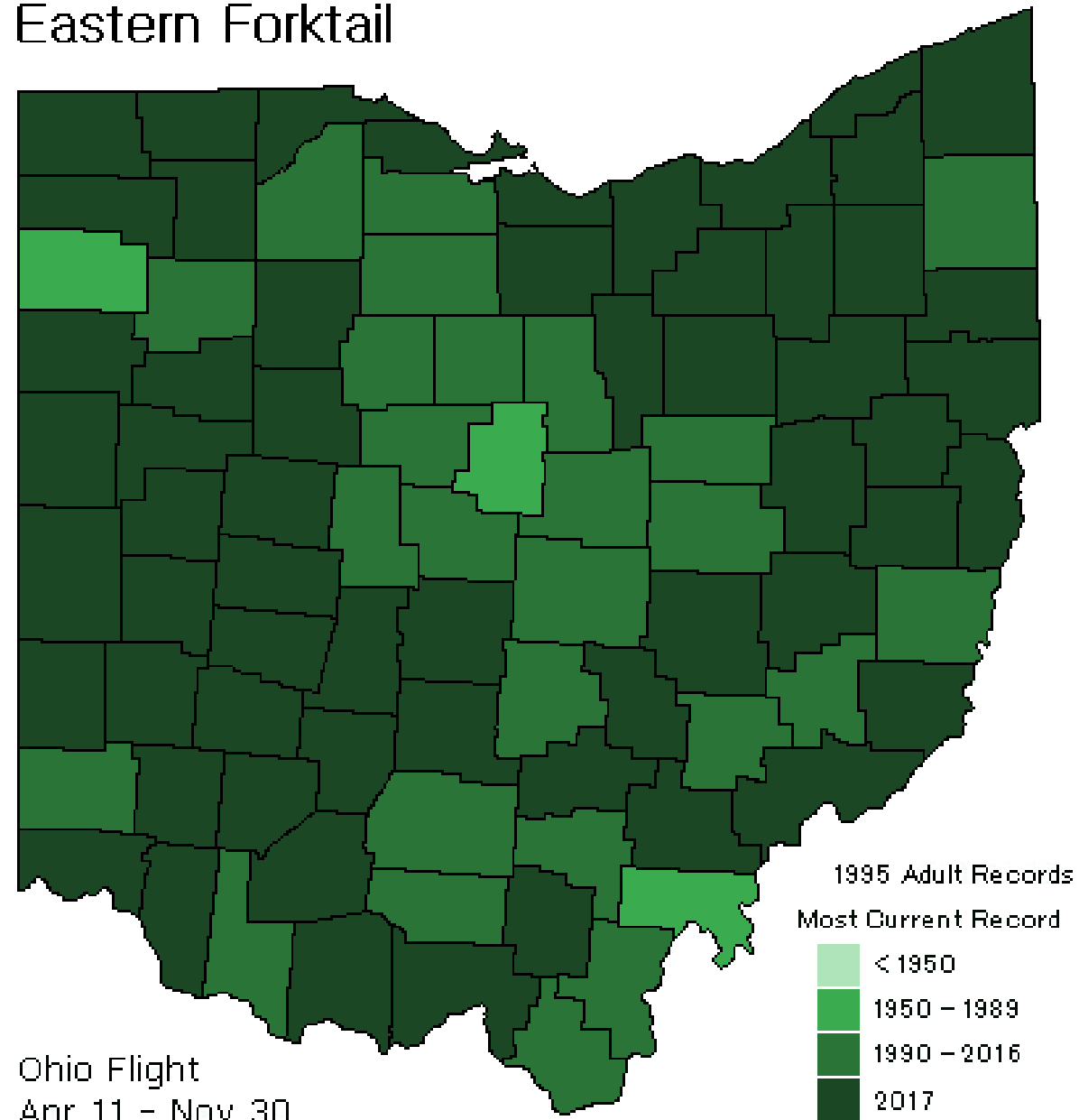
- Eastern Forktail – 421 - #2
- Fragile Forktail – 296 - #6
- Violet Dancer – 217 - #8
- Blue-fronted Dancer – 213 - #9
- Familiar Bluet – 181 - #11
- Double-striped Bluet – 176 - #13
- Orange Bluet – 175 - #14

Eastern Forktail – *Ischnura verticalis*



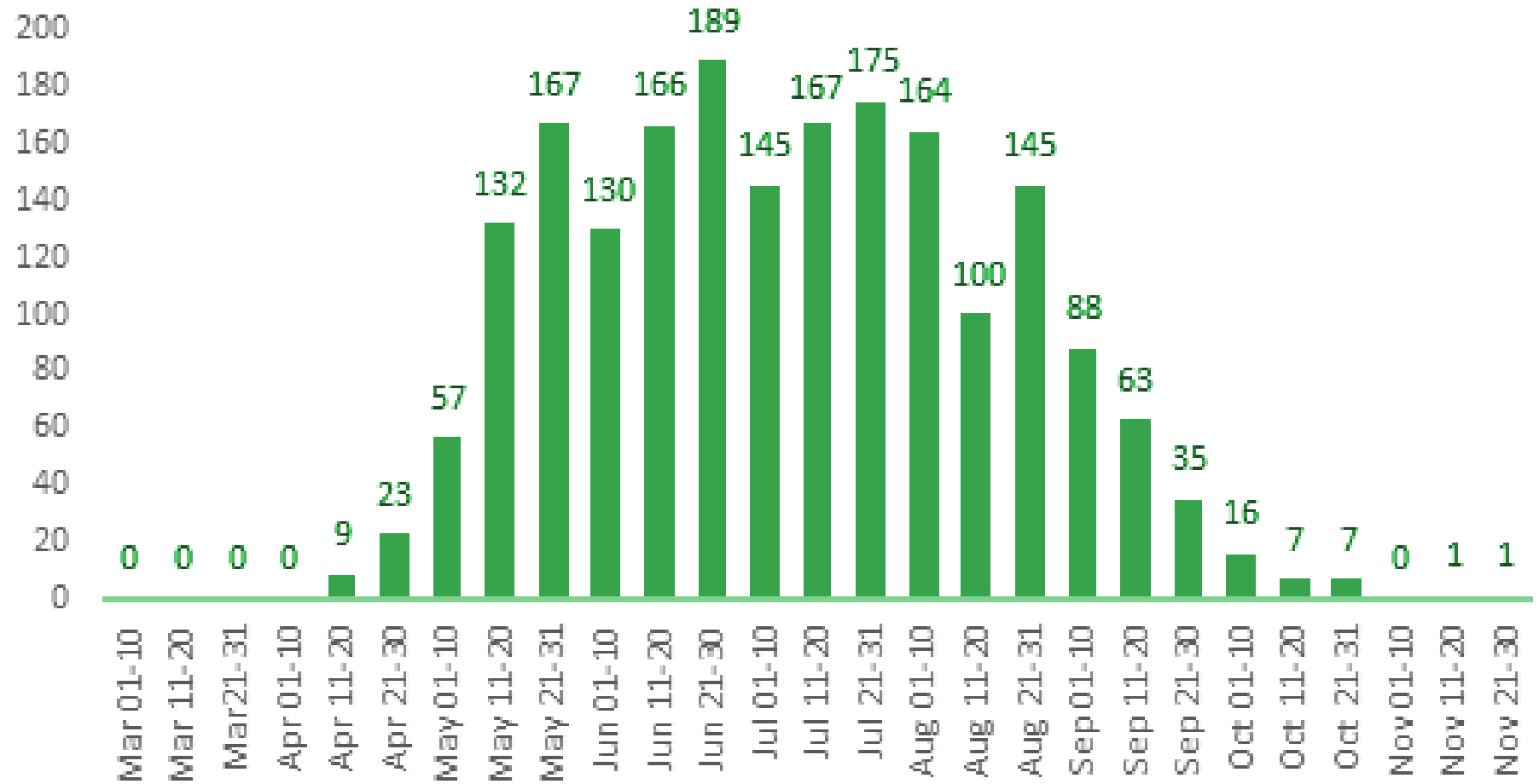
Ischnura verticalis

Eastern Forktail



Ohio Flight
Apr 11 - Nov 30

Eastern Forktail - *Ischnura verticalis*

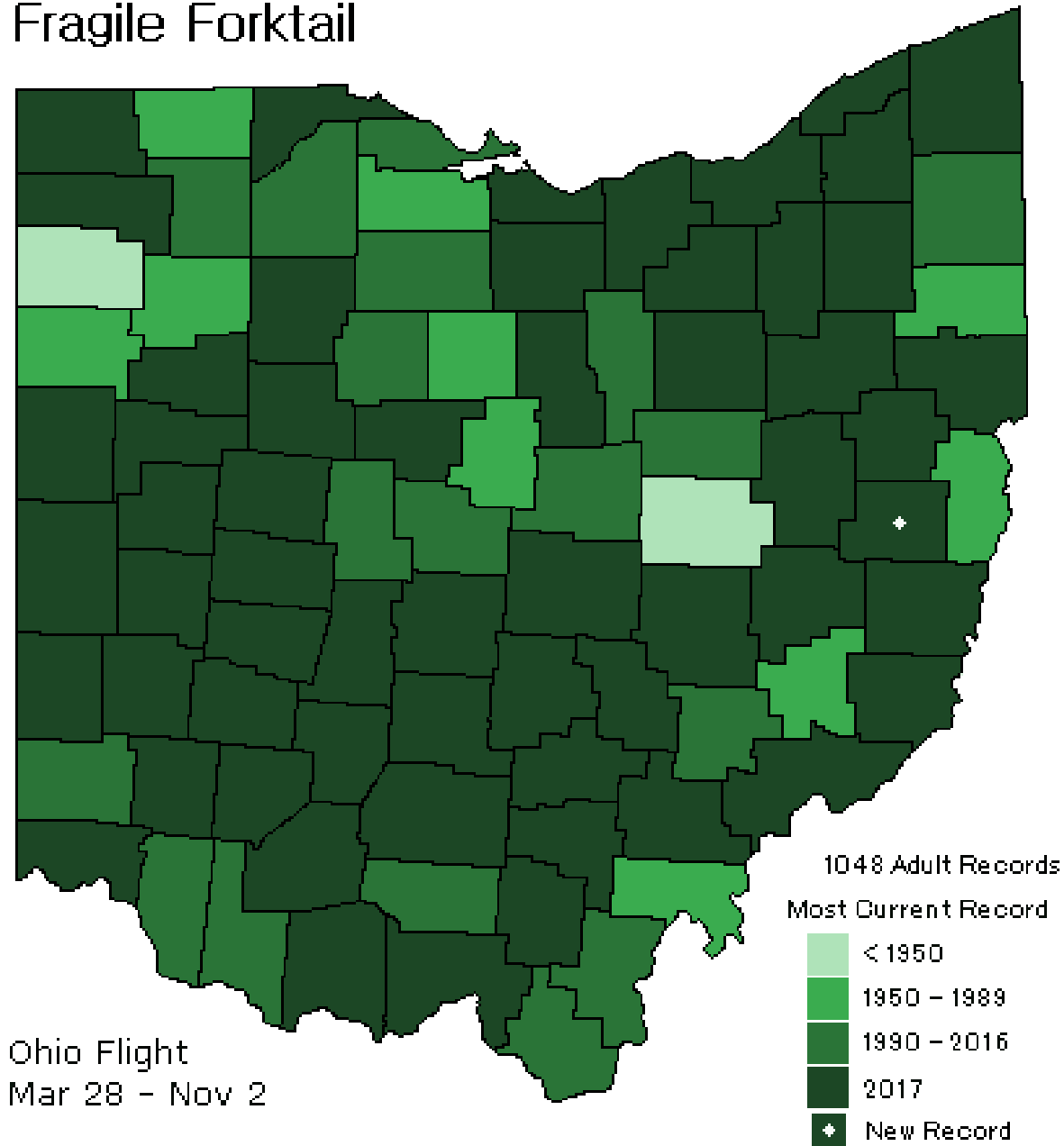


OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

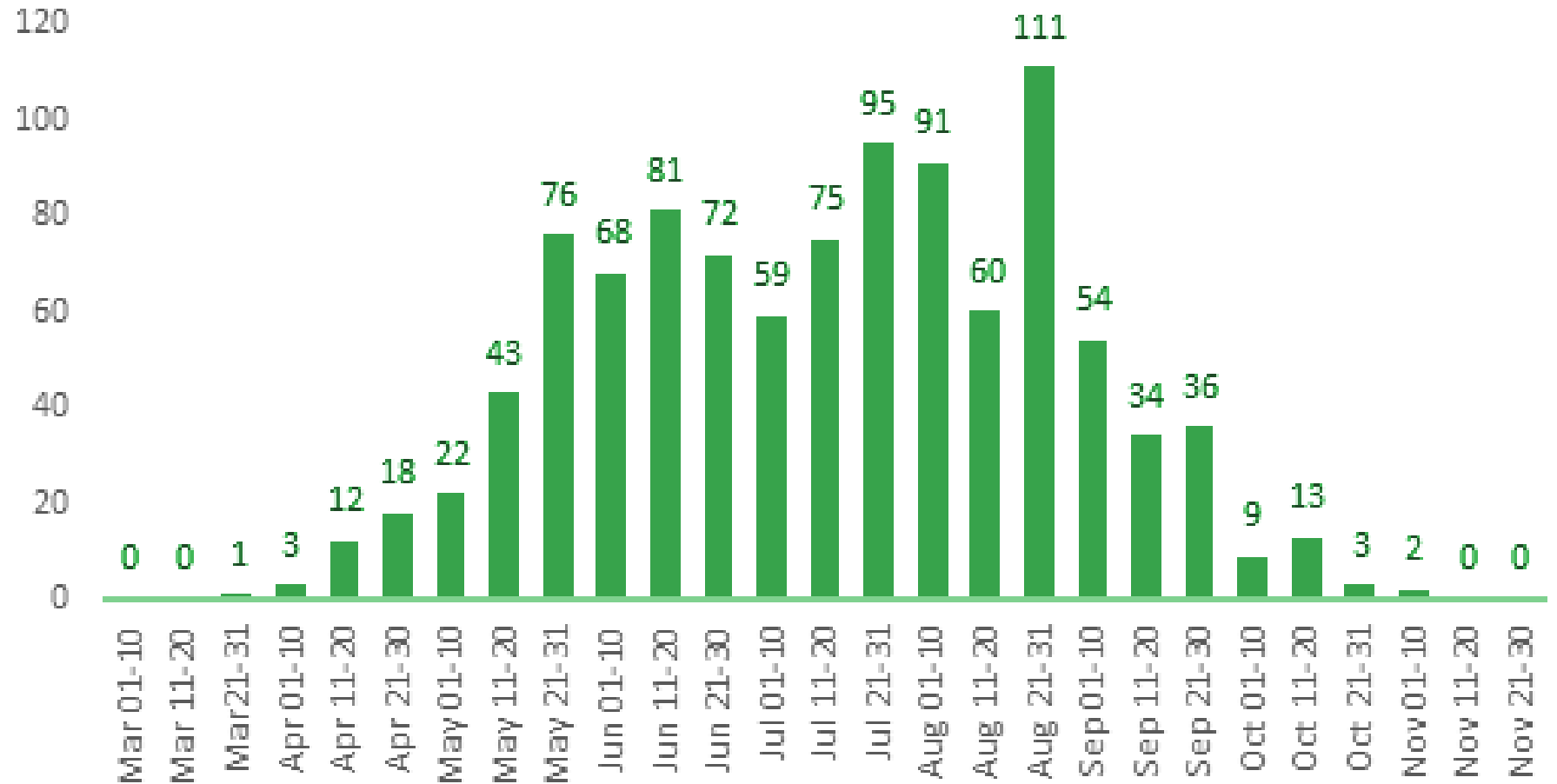
Fragile Forktail – *Ischnura posita*



Ischnura posita
Fragile Forktail



Fragile Forktail - *Ischnura posita*



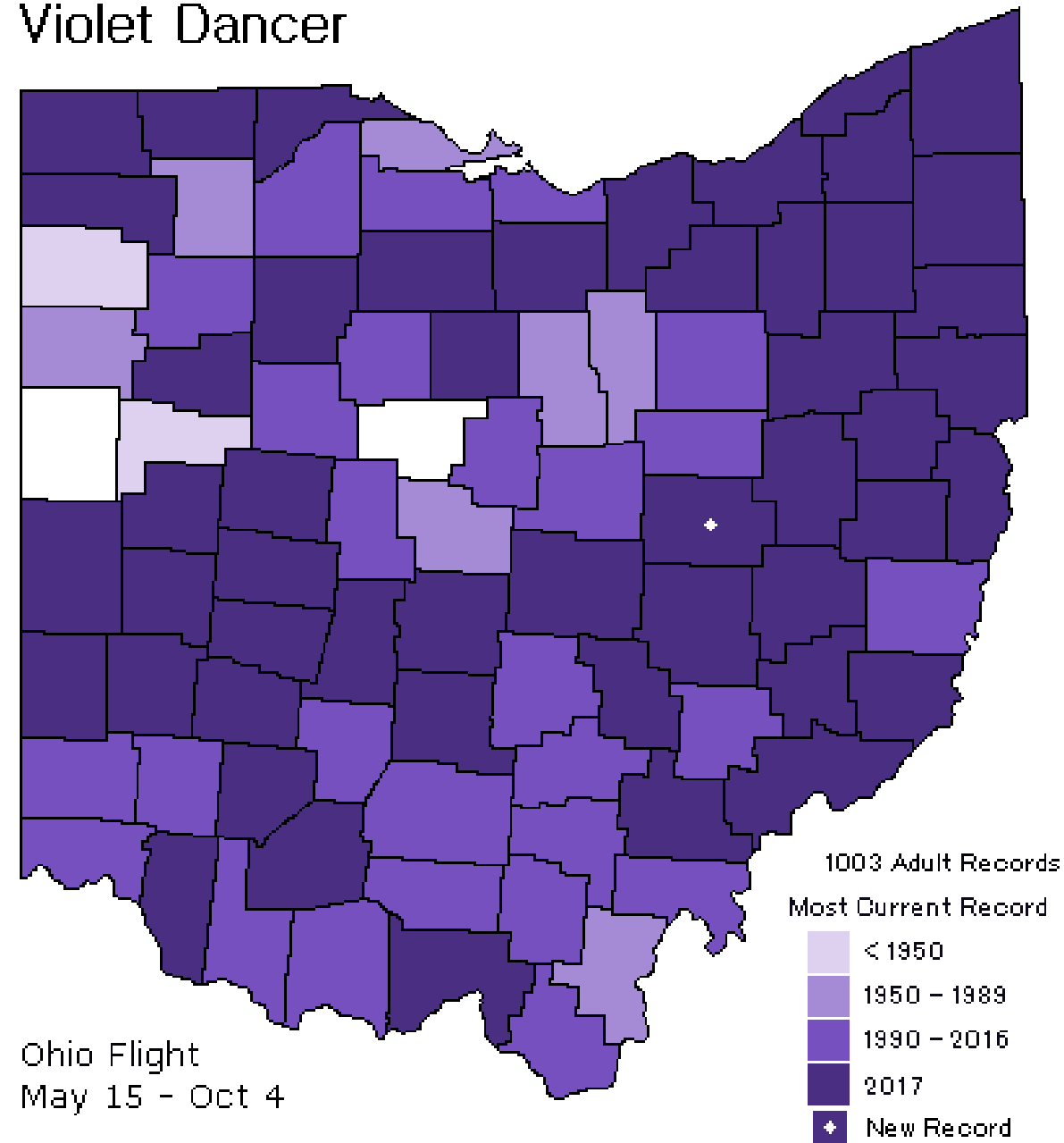
OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

Violet Dancer – *Argia fumipennis violacea*



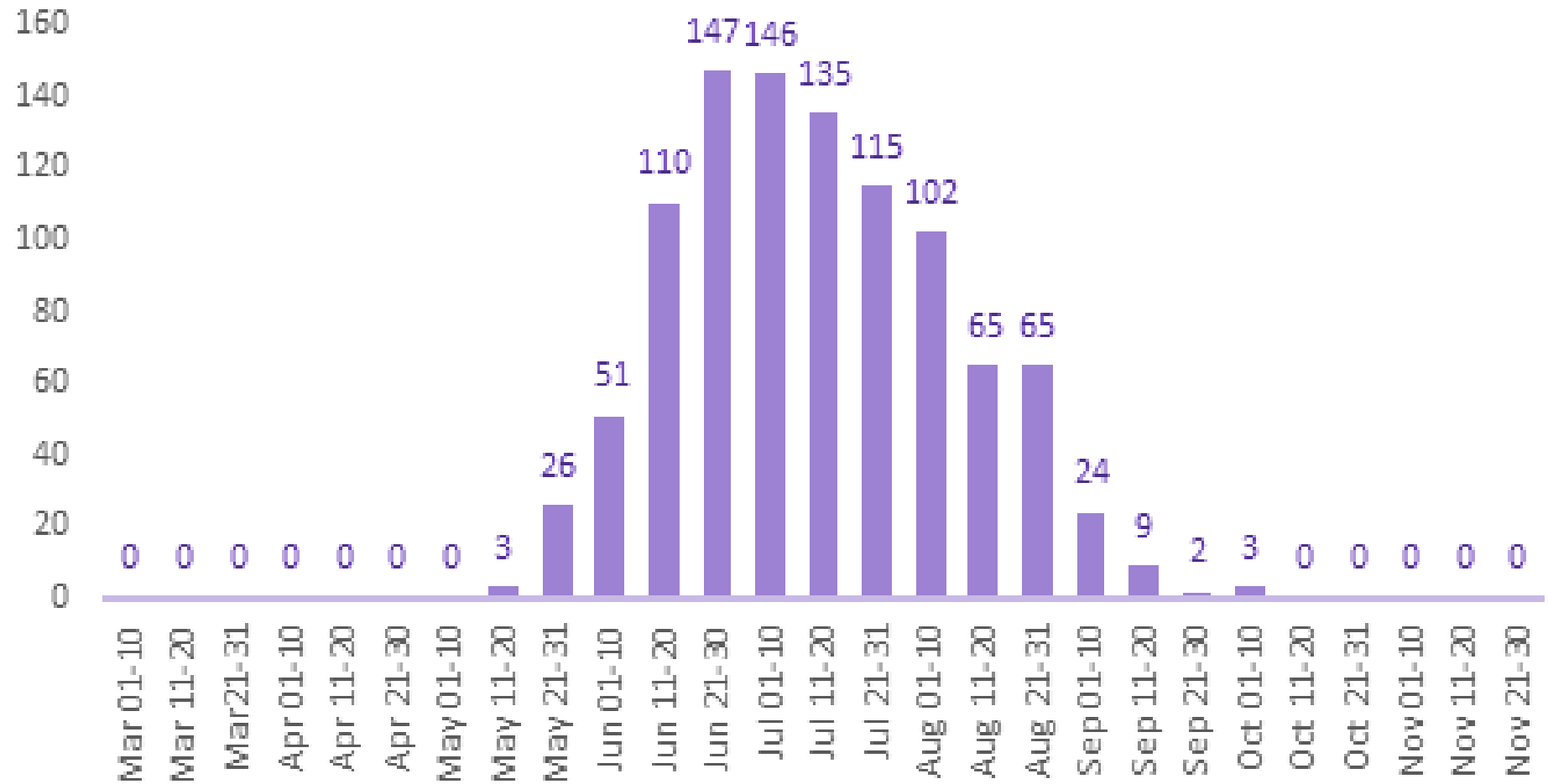
Argia fumipennis violacea

Violet Dancer



Ohio Flight
May 15 - Oct 4

Violet Dancer - *Argia fumipennis violacea*



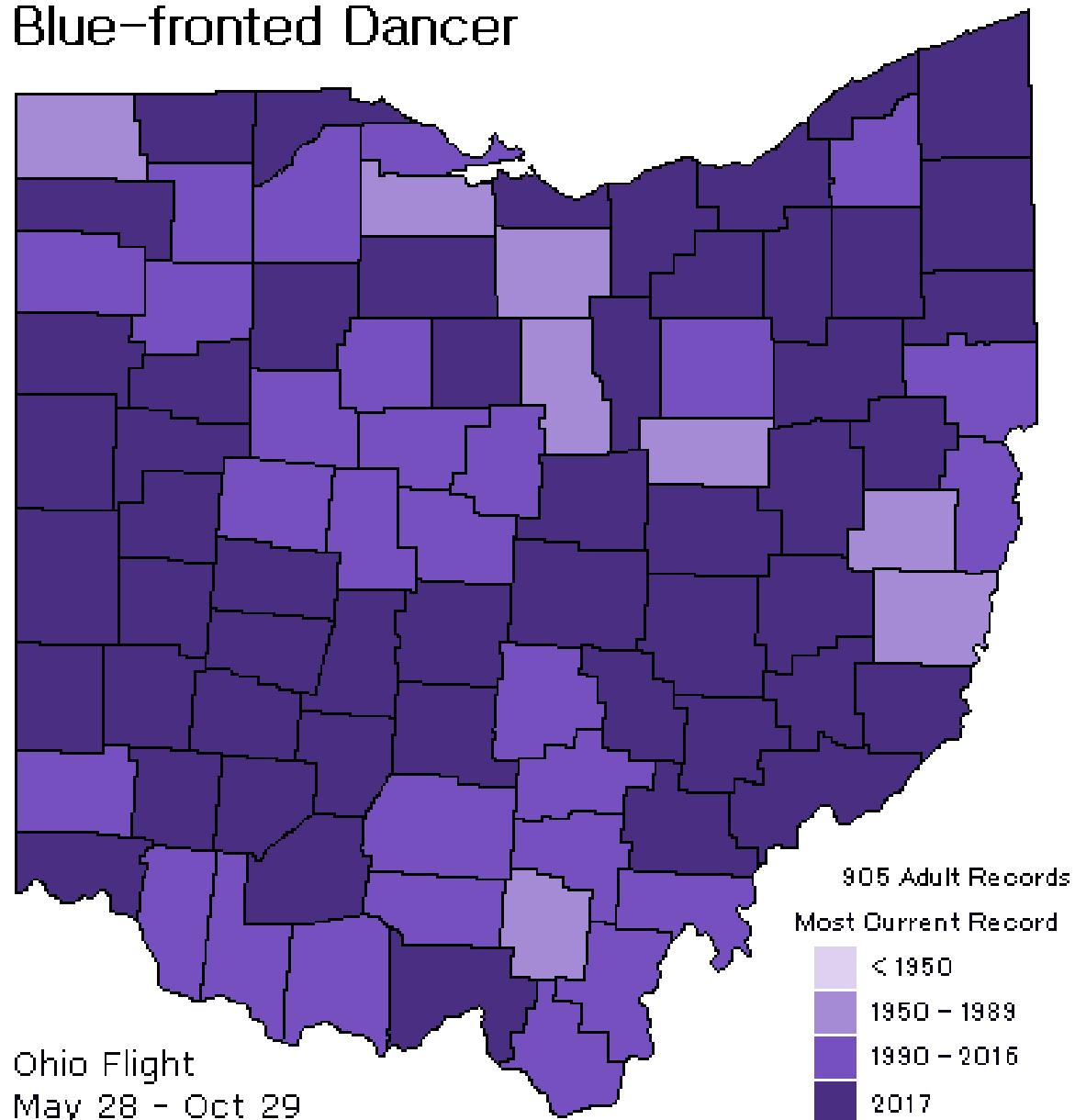
OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

Blue-fronted Dancer – *Argia apicalis*



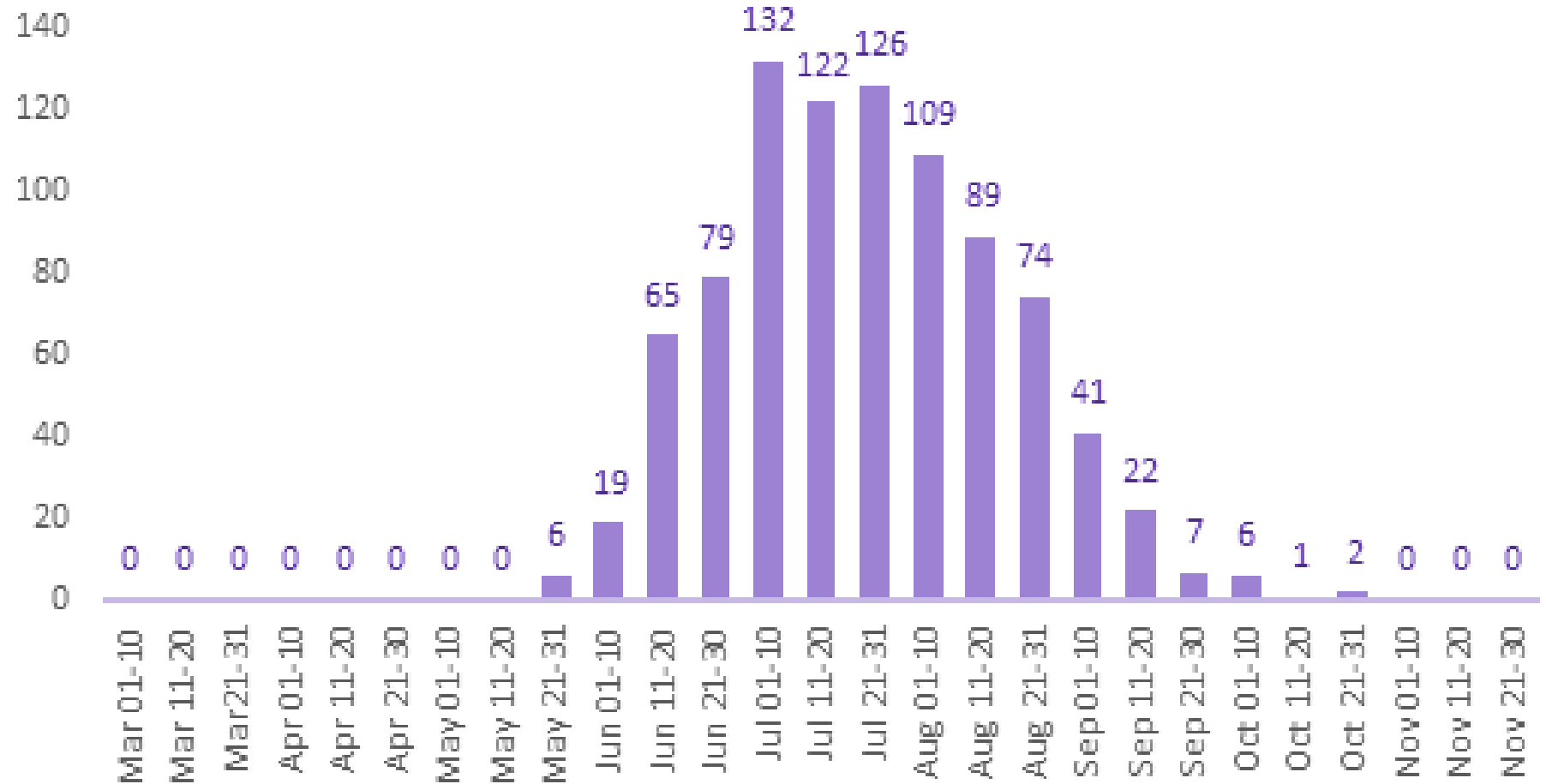
Argia apicalis

Blue-fronted Dancer



Ohio Flight
May 28 - Oct 29

Blue-fronted Dancer - *Argia apicalis*

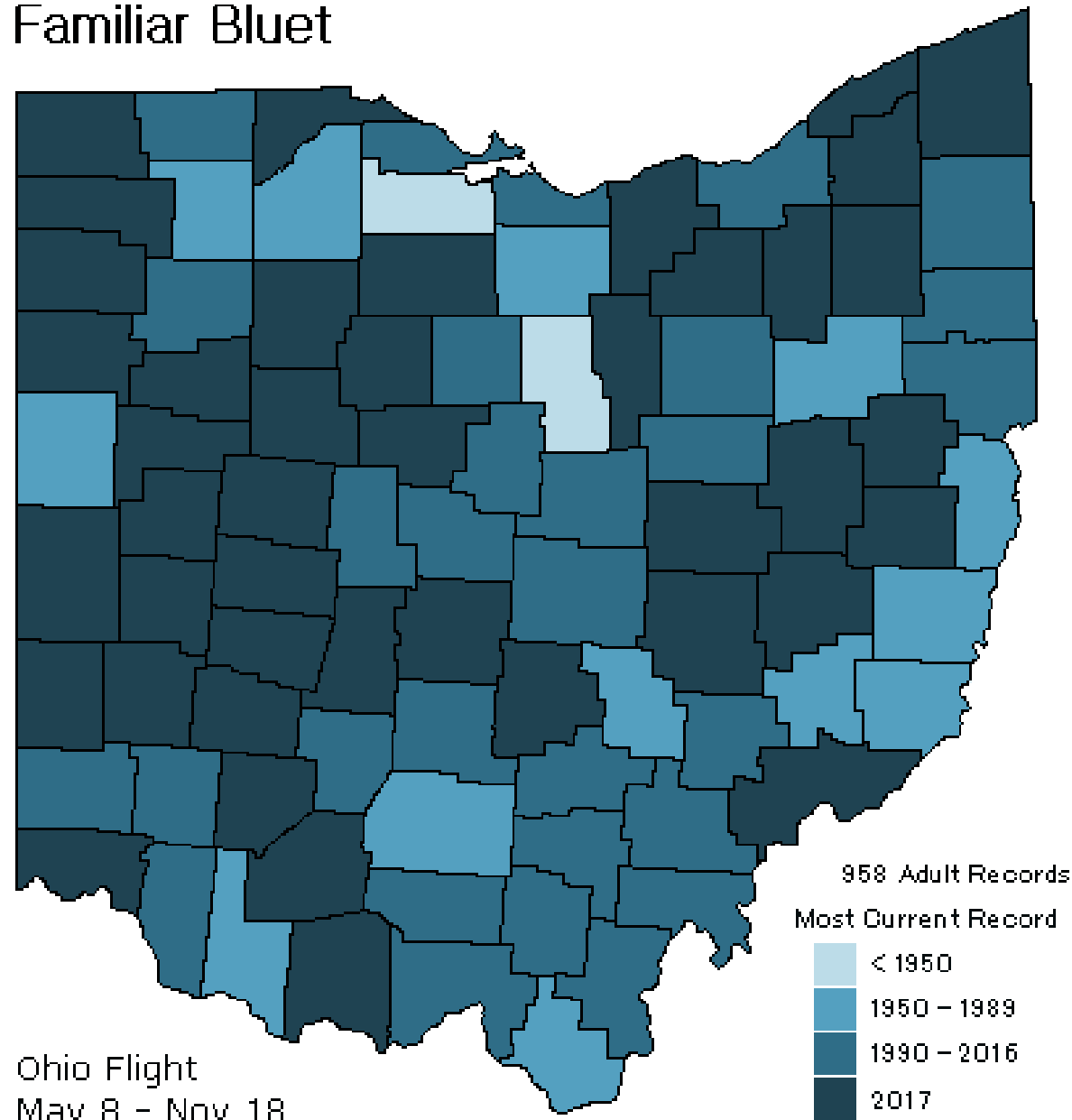


OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

Familiar Bluet – *Enallagma civile*

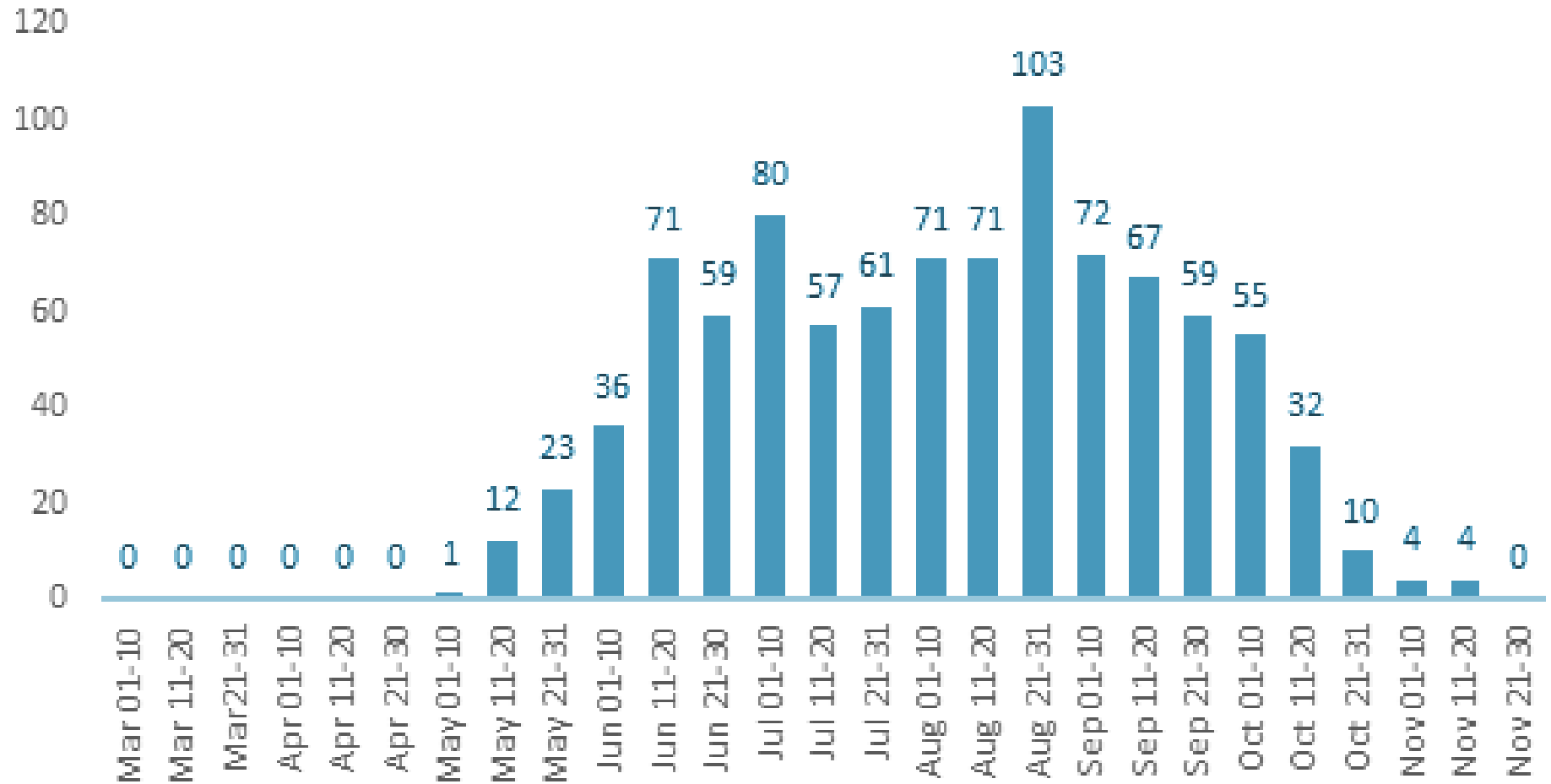


Enallagma civile
Familiar Bluet



Ohio Flight
May 8 - Nov 18

Familiar Bluet - *Enallagma civile*



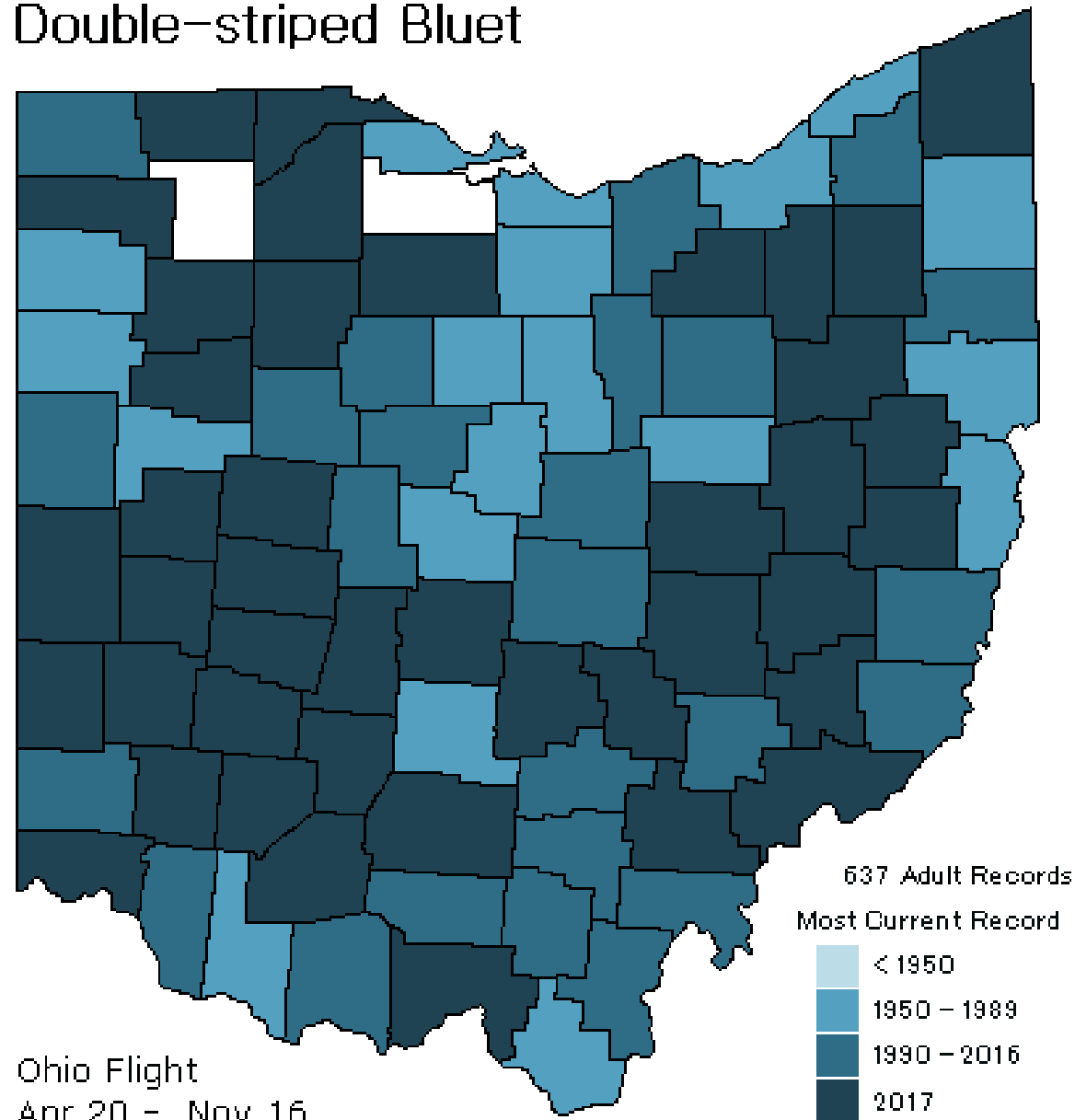
OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

Double-striped Bluet – *Enallagma basidens*



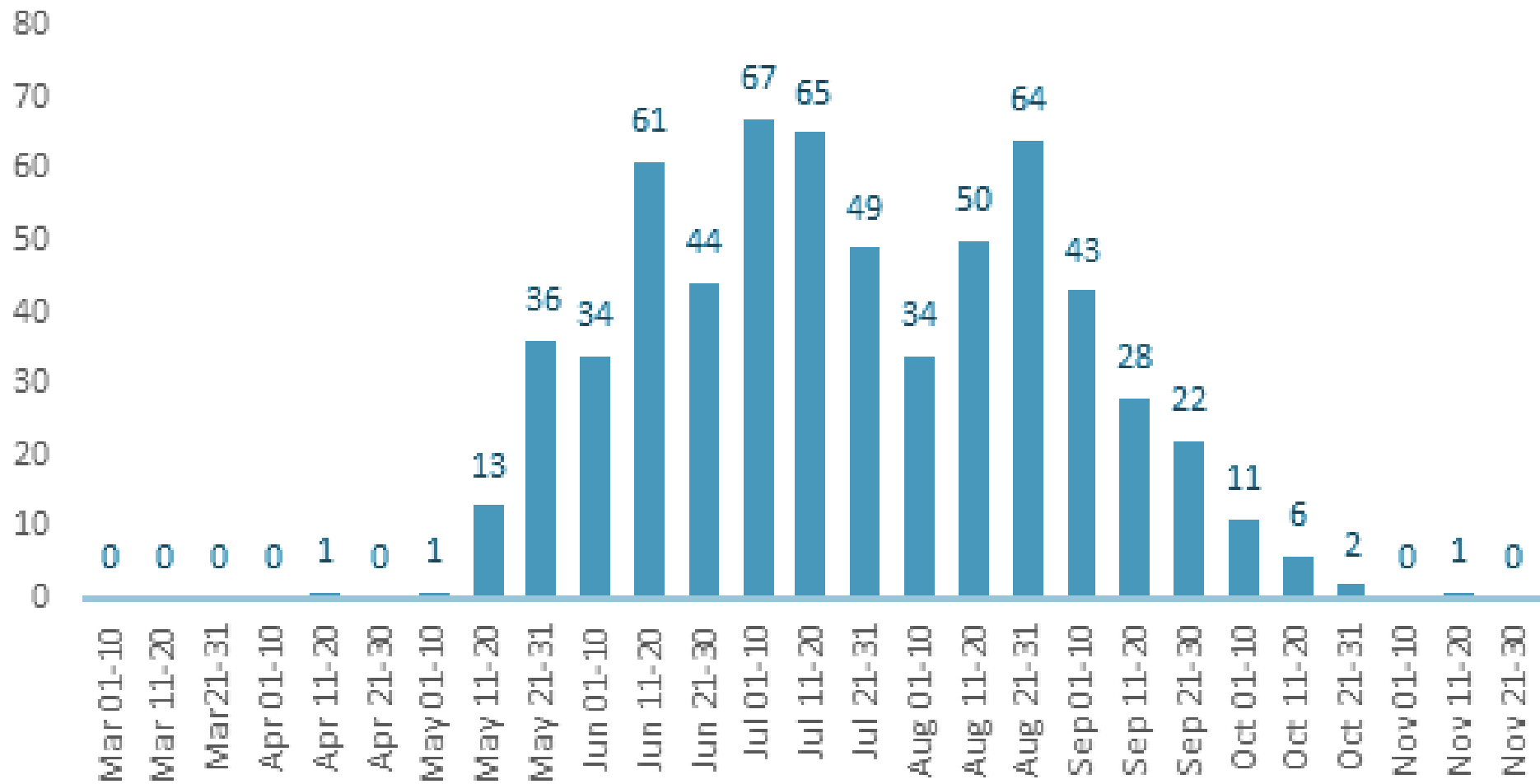
Enallagma basidens

Double-striped Bluet



Ohio Flight
Apr 20 - Nov 16

Double-striped Bluet - *Enallagma basidens*

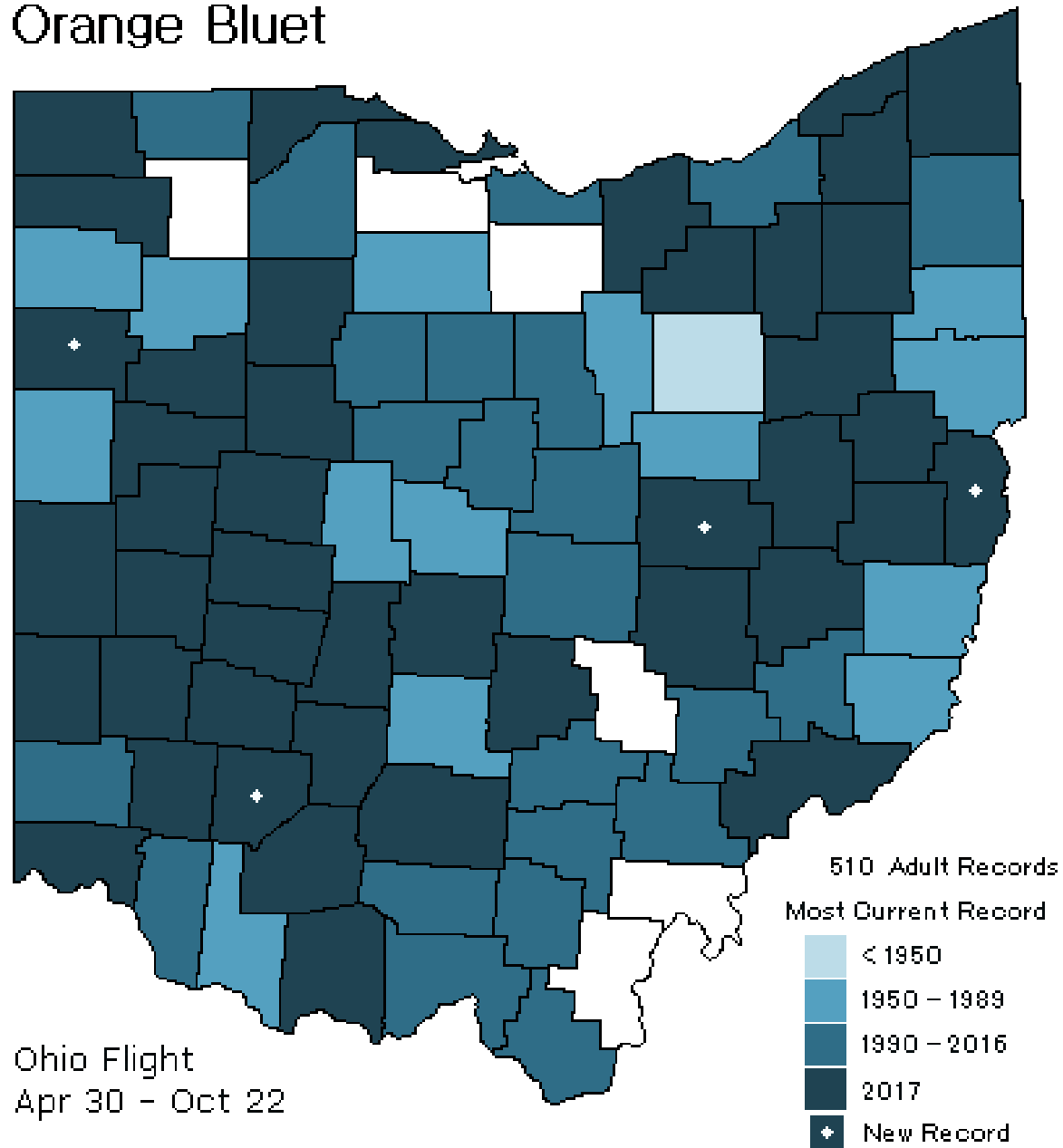


OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017

Orange Bluet – *Enallagma signatum*

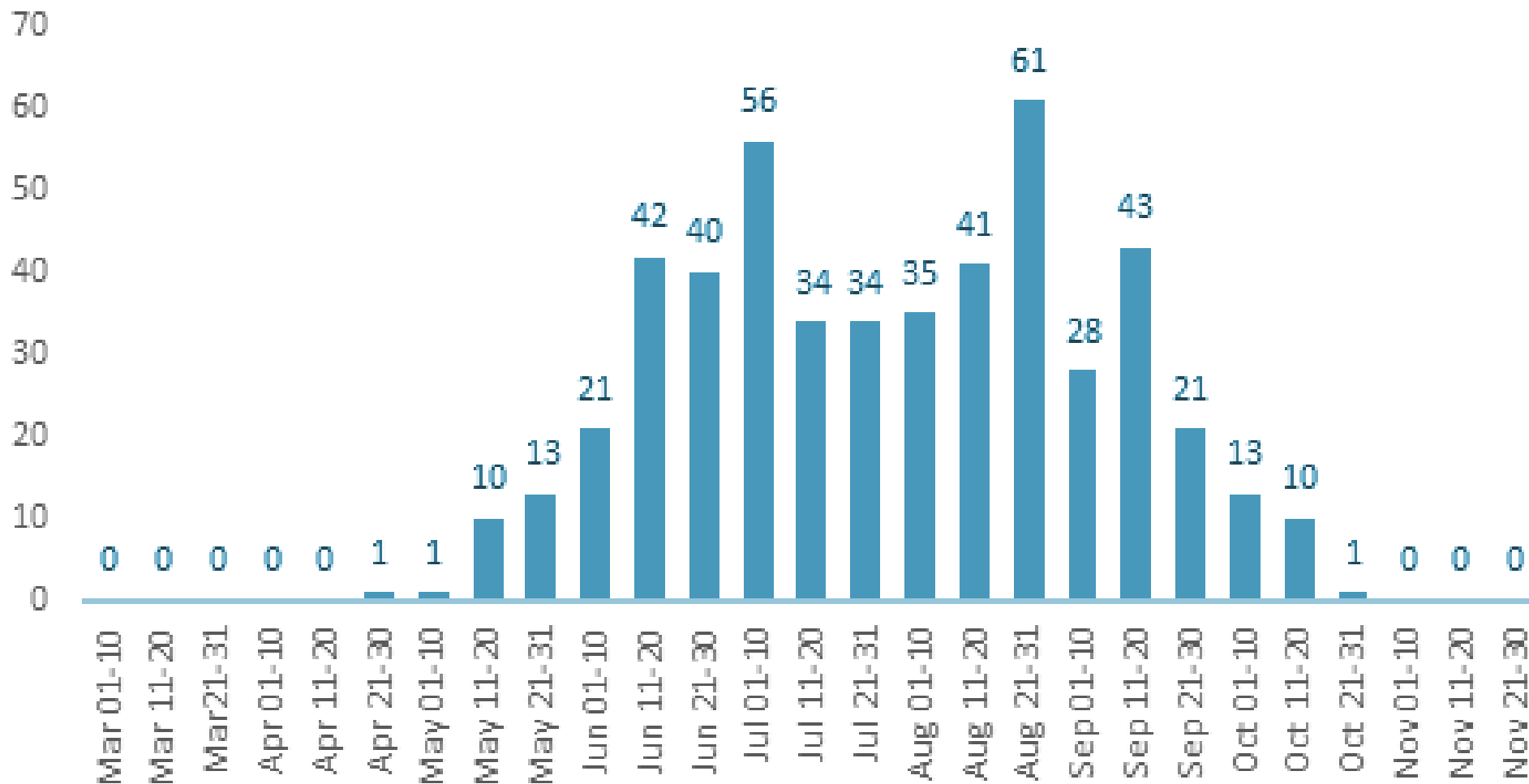


Enallagma signatum
Orange Bluet



Ohio Flight
Apr 30 – Oct 22

Orange Bluet - *Enallagma geminatum*



OBSERVATION FREQUENCY - OHIO ODONATA SURVEY DATABASE, 2017



So what's the issue?

- Sexually dimorphic -
including mimics of opposite sex -
- Teneral/Immature
- Developmental change in color
and pigmentation
- Wide color range in females for some species
- Can be considerable overlap in appearance
of females in the same genus
- Phenotypic variation



iNat - unresolved Damselfly observations
typically a female
in some early stage of maturation



Teneral

















Not so easy - Females

- Less colorful - not really cryptic, just less noticeable (males are expendable)
- Ovipositor at the terminal end of abdomen anatomy has to match male optimized to place eggs in preferred location
- Typically spend less time at water forage away from water arrive at rendezvous with egg clutch
- A good clue - Which species of males are flying?
- Tandem is a pretty good sign

Tandem



Ovipositing



Pair



Wheel



Ovipositing




Pair






Dancers - 7 species*, all can be seen

- Relatively larger than other two genus'
 - Wings are held above the abdomen at rest
 - Wings tend to appear to be relatively wider
 - Long slender spines on tibia
 - Will perch on the ground –
unlike other discussed genus'
- 

Jul 28, 2015





Bluets – 15 species

- Wings cover the abdomen at rest
- Eye spots are important in ID
- Mature males can be broken up into 3 groups based on abdominal pigmentation:
 - mostly blue (Familiar, Double-striped)
 - mostly black (Skimming, Stream, Azure, Westfall's Slender, Turquoise)
 - in-between (Tule)
 - non-blue (Orange, Vesper)
 - unique (Rainbow)



Bluets

- Learn the field marks

Double-striped - aptly named - stripe on thorax

Skimming - unique pattern on S2

Azure - only Bluet with pigmentation on S7-S9

Orange, Vesper, Rainbow – colors

Western Slender – Eyespots

Stream – S8, S9 pattern

- Understand you may need to net some individuals for ID
- We want 2018 records for Hagen's, Marsh, and Boreal!

Bluet



Bluet




Bluet



Bluet





Forktail - 4 species

2 are amongst our most common Odonates
3rd (Citrine) readily observable
the 4th (Lilypad) can be found

- Wings tend to appear to be relatively shorter
- We're looking for Lilypad Forktail –
characteristic pose on lilypad
- Citrine - stigma unique

Forktail

