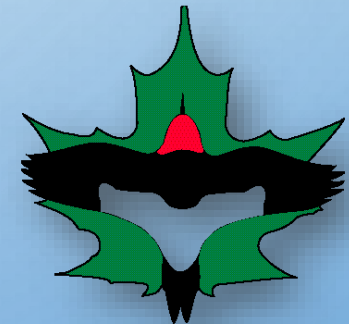


# ADVENTURES WITH LAURA'S CLUBTAIL (*Stylurus laurae*)

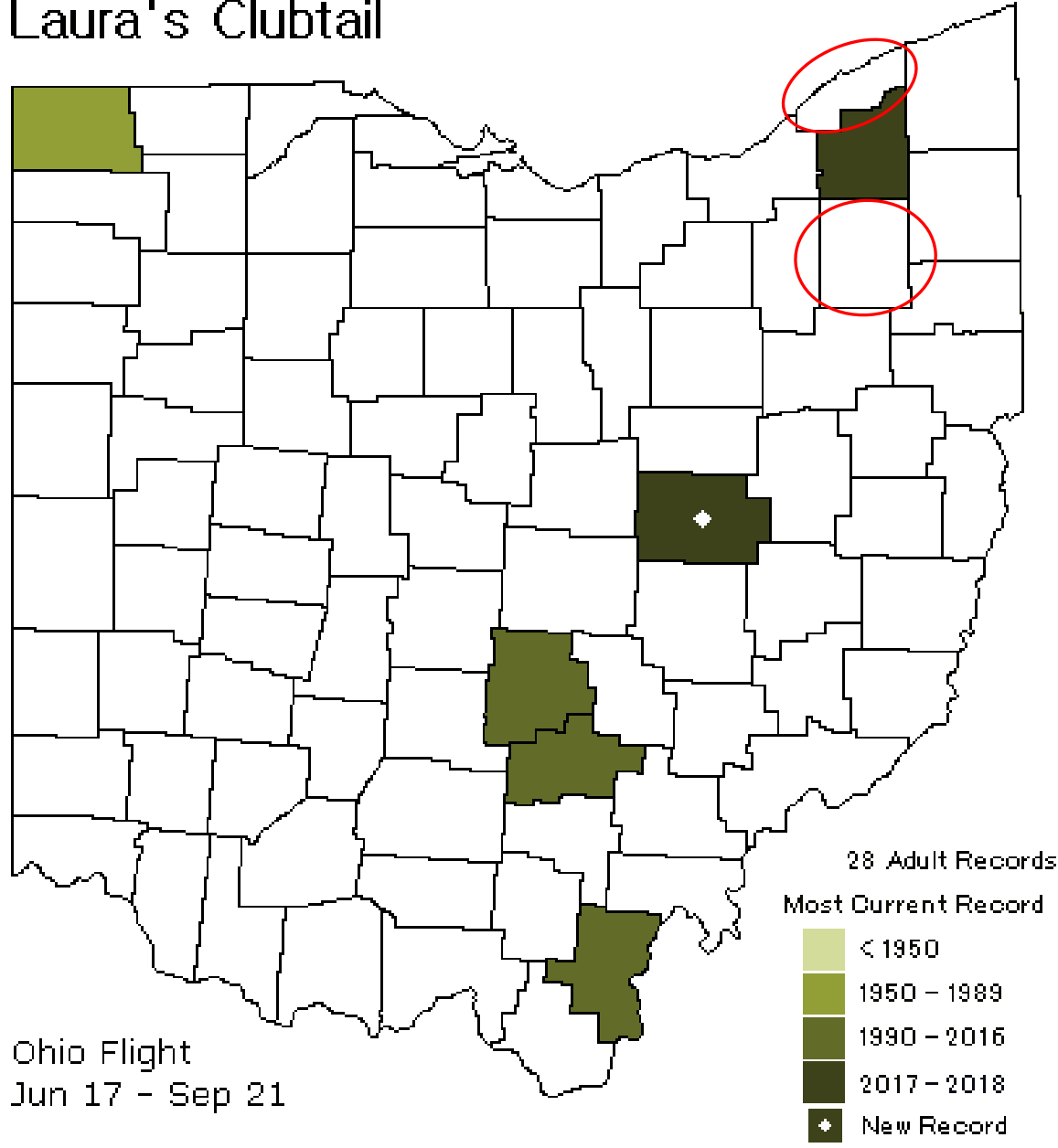


Linda Gilbert  
Geauga Park District



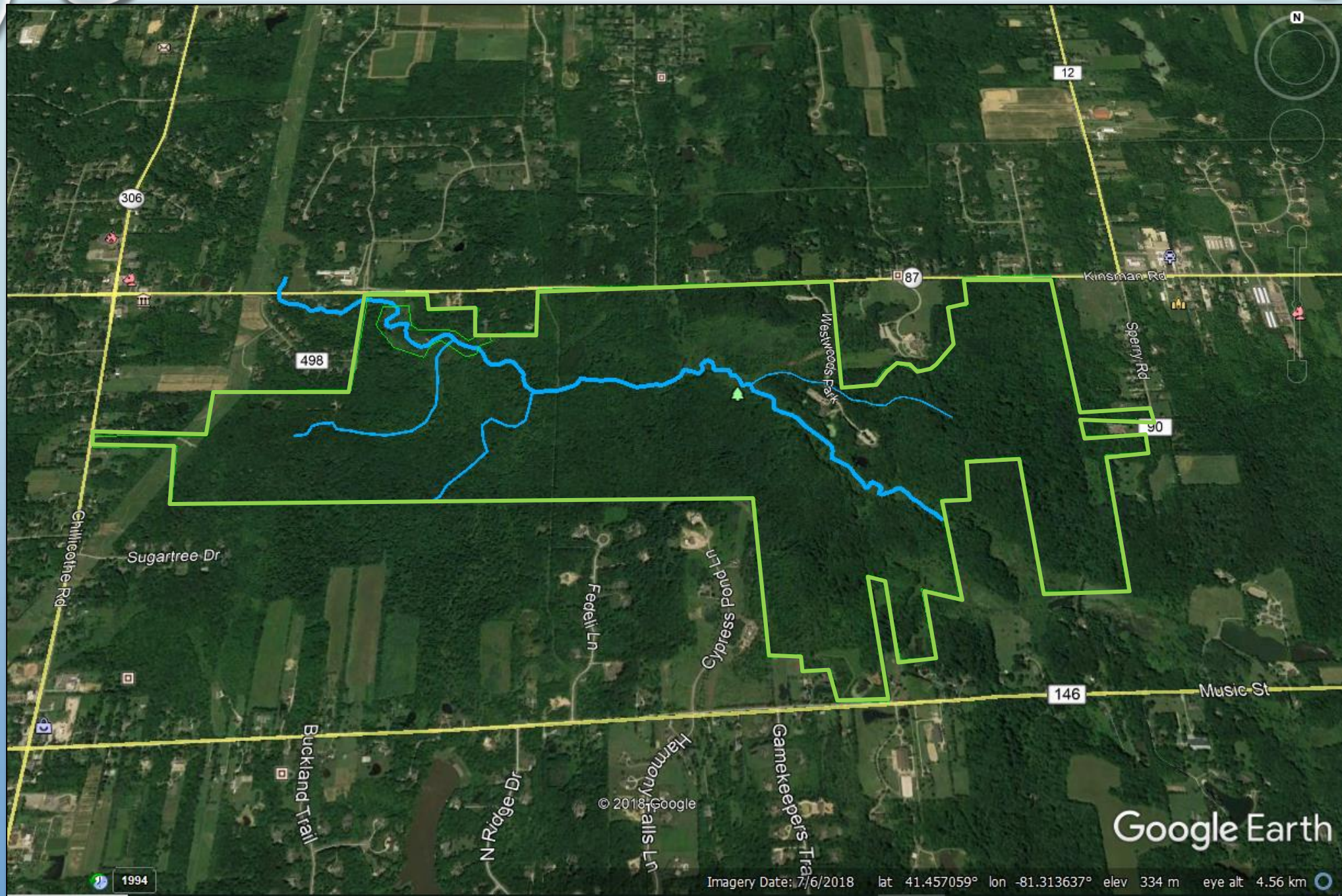
*Stylurus laurae*

## Laura's Clubtail



# Current Distribution

--Also per DDNEO2, verbal records(?)  
from Sand Creek (Portage) and  
Penitentiary Glen (Lake)



© 2018 Google

Google Earth

Imagery Date: 7/6/2018 lat 41.457059° lon -81.313637° elev 334 m eye alt 4.56 km

1994

## HABITAT REQUIREMENTS

“Clean, sandy-bottomed streams” -- Rosche/Semroc/Gilbert

“Clean streams with sand-mud bottoms” --Dunkle

“Sand substrates of smaller streams with very good water quality” -- [michodonata.org](http://michodonata.org)

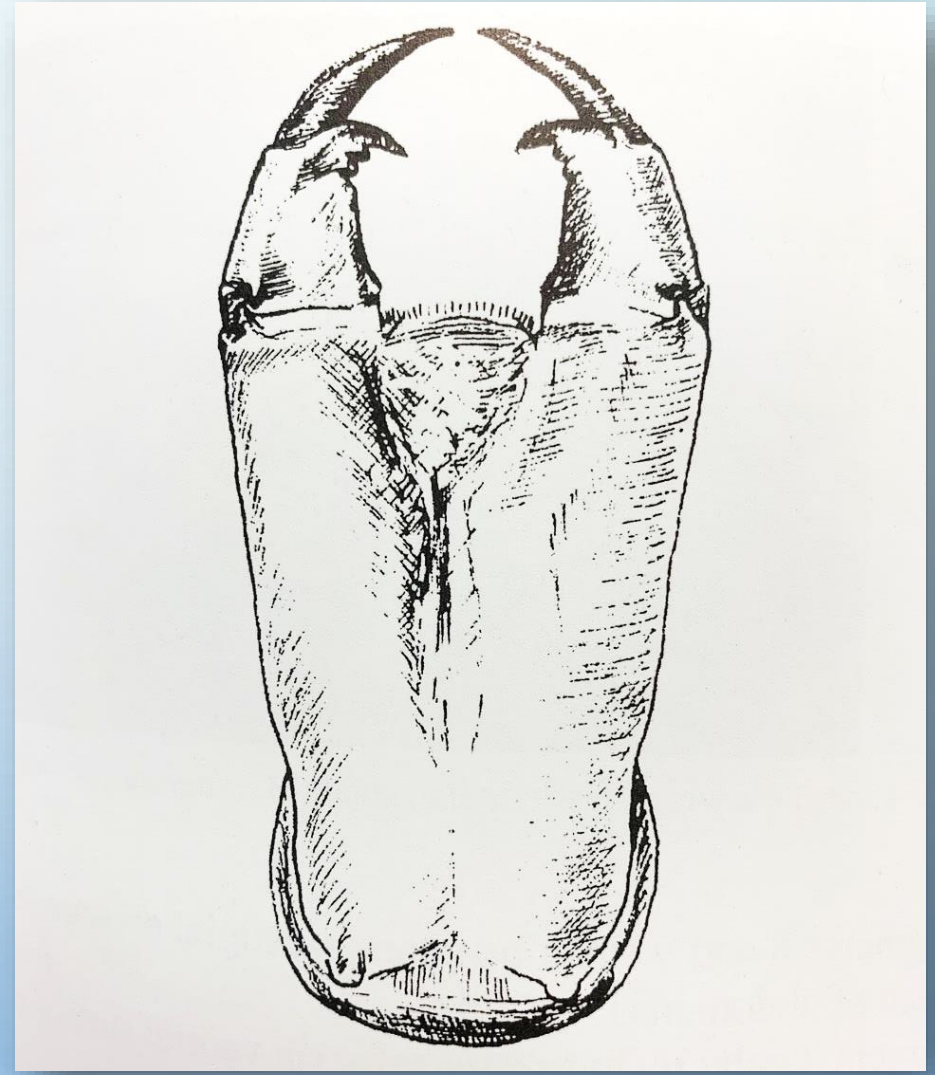






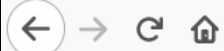
June and July 2006











michodonata.org/MOL/STYLURUS.htm#4

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### *Stylurus spiniceps* (Walsh, 1862) - Arrow Clubtail - Map 6

#### Key to Mature Larvae of Michigan *Stylurus*

(Adopted from K. Tennesen, unpublished information)

1a. Ab9 about 2.0x as long as its basal width (fig); lateral spines of Ab9 3x length of those of Ab8 - ***S. spiniceps***

1b. Ab9 about 1.5x as long as its basal width (fig); lateral spines of Ab9 no more than 2x length of those of Ab8 - ***S. laurae***

2a(1b). Anterior margin of prementum markedly convex (fig); width of Ab10 1.5-1.8x its length (fig) - ***S. annicola***

2b. Anterior margin of prementum appearing straight, at most slightly convex (fig); width of Ab10 < 1.25x its length (fig) - ***S. spiniceps***

[Back to previous couplet \(1\)](#)

3a(2a). Ab9 wide, its width > 1.7x its middorsal length (fig); basal width of lateral spine of Ab9 in dorsal view > 1.5x its middorsal length (fig); Ab10 wide, its width greater than or equal to 1.6x its middorsal length (fig) - ***S. scudleri***

3b. Ab9 narrower, its width < 1.4x its middorsal length (fig); basal width of lateral spine of Ab9 in dorsal view < 1.5x its middorsal length (fig); Ab10 narrower, its width < 1.35x its middorsal length (fig) - ***S. notatus***

[Back to previous couplet \(2\)](#); [Back to beginning of key](#)

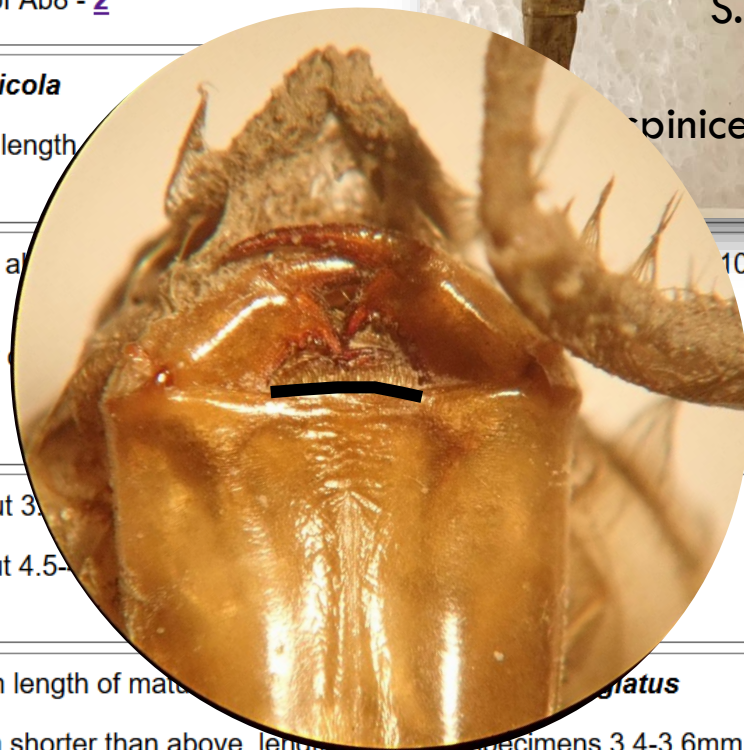
4a(3b). Width of Ab9 about 1.3x its length (fig); length of Ab9 1.3-1.4x length of Ab8 (fig); width of Ant3 about 3.5-4.0x its length (fig) - ***S. annicola***

4b. Width of Ab9 about 0.9-1.1x its length (fig); length of Ab9 1.4-1.6x length of Ab8 (fig); width of Ant3 about 4.5-5.0x its length (fig) - ***S. spiniceps***

[Back to previous couplet \(3\)](#); [Back to beginning of key](#)

5a(4b). Proximal palpal teeth wider than long (fig); Ab10 wider, middorsal length < 0.9x its width; prementum length of mature specimens 3.4-3.6mm - ***S. annicola***

5b. Proximal palpal teeth as long as wide (fig); Ab10 narrower, middorsal length > 0.9x its width; prementum shorter than above, length of mature specimens 3.4-3.6mm - ***S. notatus***



August 6,  
2006





July 27,  
2008







July 16, 2014





August 17, 2016



*Stylurus laurae*  
Geauga, OHIO  
Russell Twp.  
August 2017



The background is a light blue gradient. There are several realistic water droplets of various sizes in the corners. In the top-left corner, there are several droplets, including a large one. In the top-right corner, there are a few smaller droplets. In the bottom-right corner, there is a cluster of droplets, including a large one. In the bottom-center area, there are a few more droplets.

**SEPTEMBER 6, 2018**



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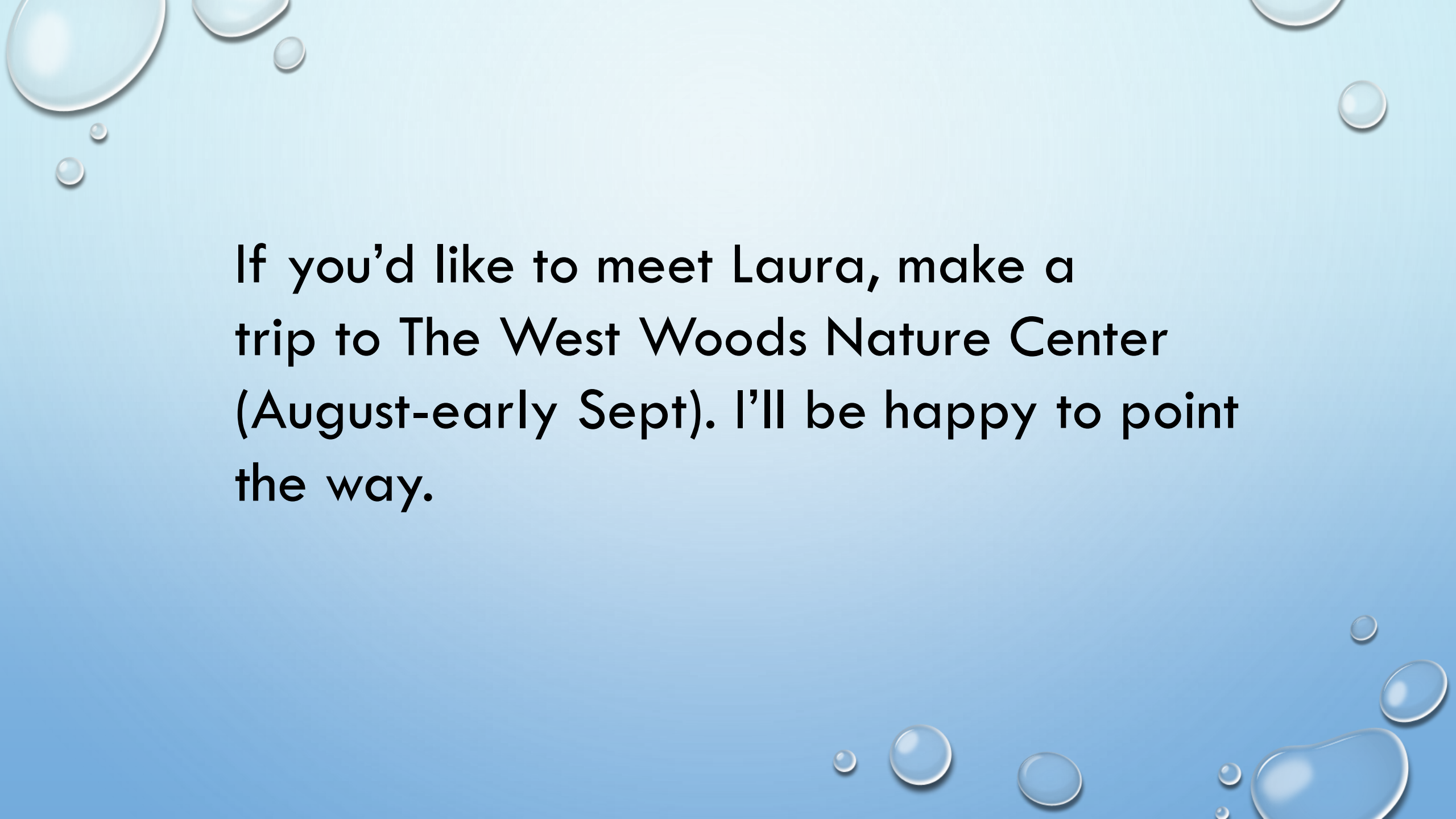


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If you'd like to meet Laura, make a trip to The West Woods Nature Center (August-early Sept). I'll be happy to point the way.