Identifying Potential Vernal Pools CACIWC 11-16-2024

Edward M. Pawlak, PWS





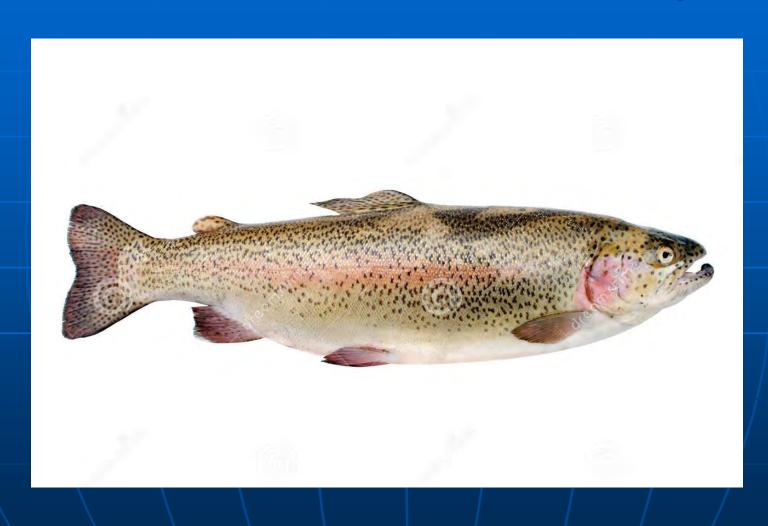
1. Confined Basin Depression With No Permanent Inlet or Outlet







3. No Permanent Finfish Population



4. Support the Breeding of at Least One "Obligate" Species



Spotted Salamander





Diploid Blue-Spotted Salamander (State Endangered)



Jefferson Salamander "Complex" (State Species of Special Concern)





Marbled Salamander



Wood Frog









Eastern Spadefoot Toad (State Endangered)



Fairy Shrimp



6. Pools are Used by Many Facultative Species



















Vernal Pool Ecology

1. Pool-Breeding Amphibians ...



breed here ...







... but live here most of the year

2. Vernal Pool Amphibians Migrate Long Distances to and from a Breeding Pool





410 foot "salamander life zone" (Faccio)



Range: 334-**1,115' Median: 554' (Baldwin et al.** 2006)

How Can You Conserve a Natural Resource if You Don't Know Where It Is?

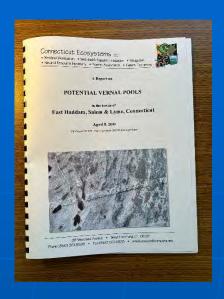
The Farmington Valley Biodiversity Project

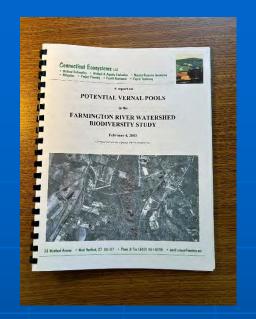


A Model for Intermunicipal Biodiversity Planning in Connecticut

Remote Identification of Potential Vernal Pools: Old School



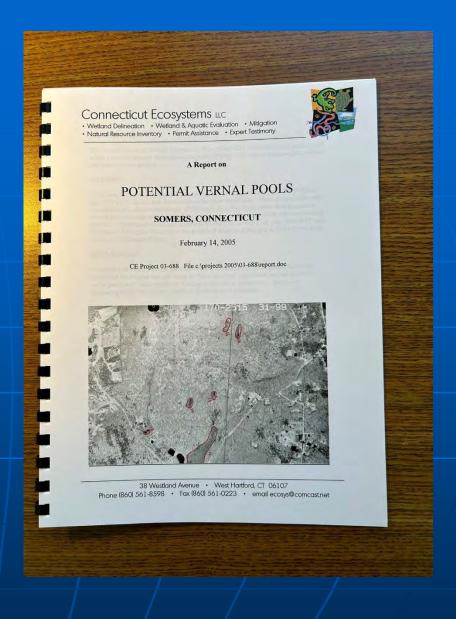






Aerial photo scale

PVP latitude/longitude?



Who owns the property?

low to find PVPs in situ?

Identifying Potential Vernal Pools with Google Earth Pro





Hublein Tower

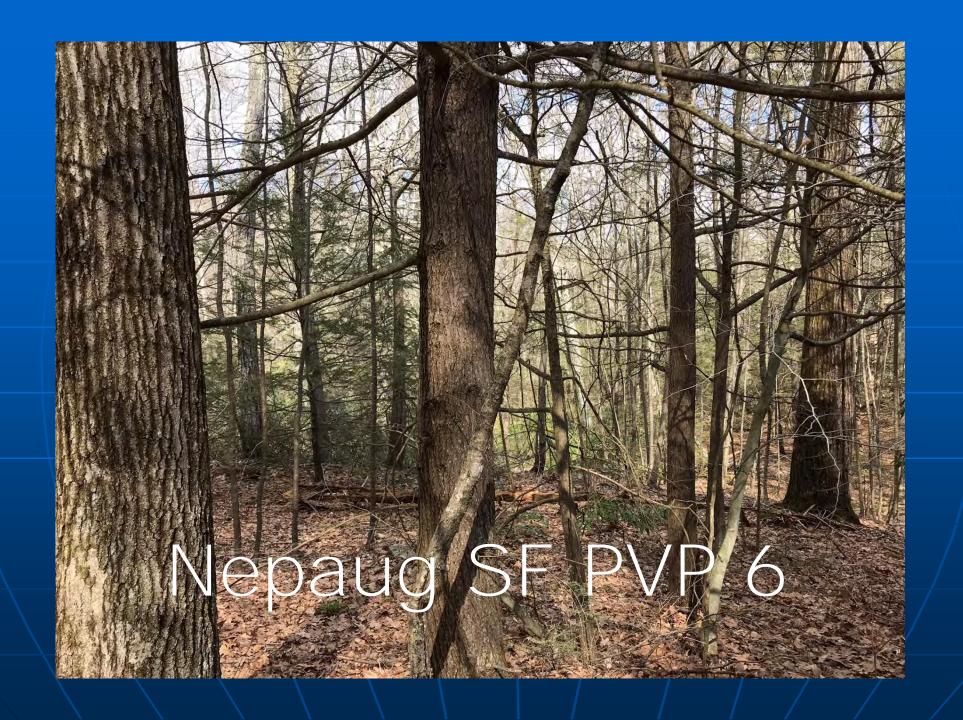


Nepaug State Forest PVP 1





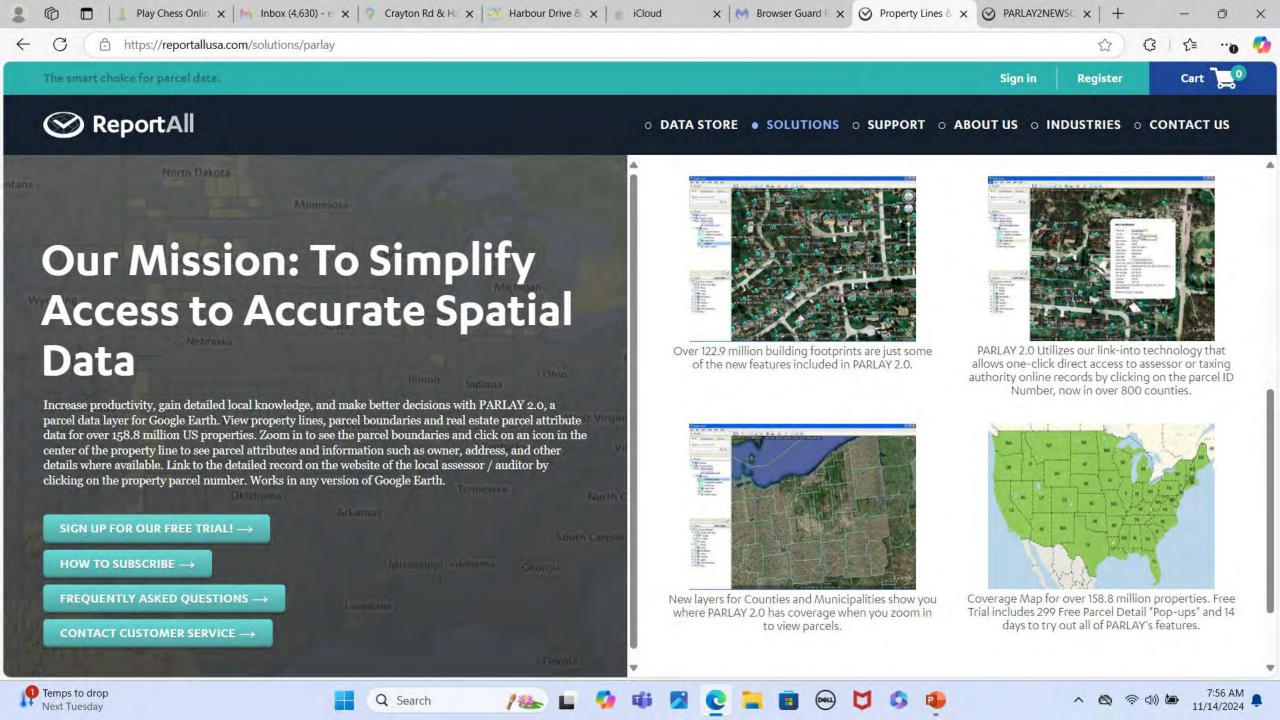
Nepaug State Forest PVP 6

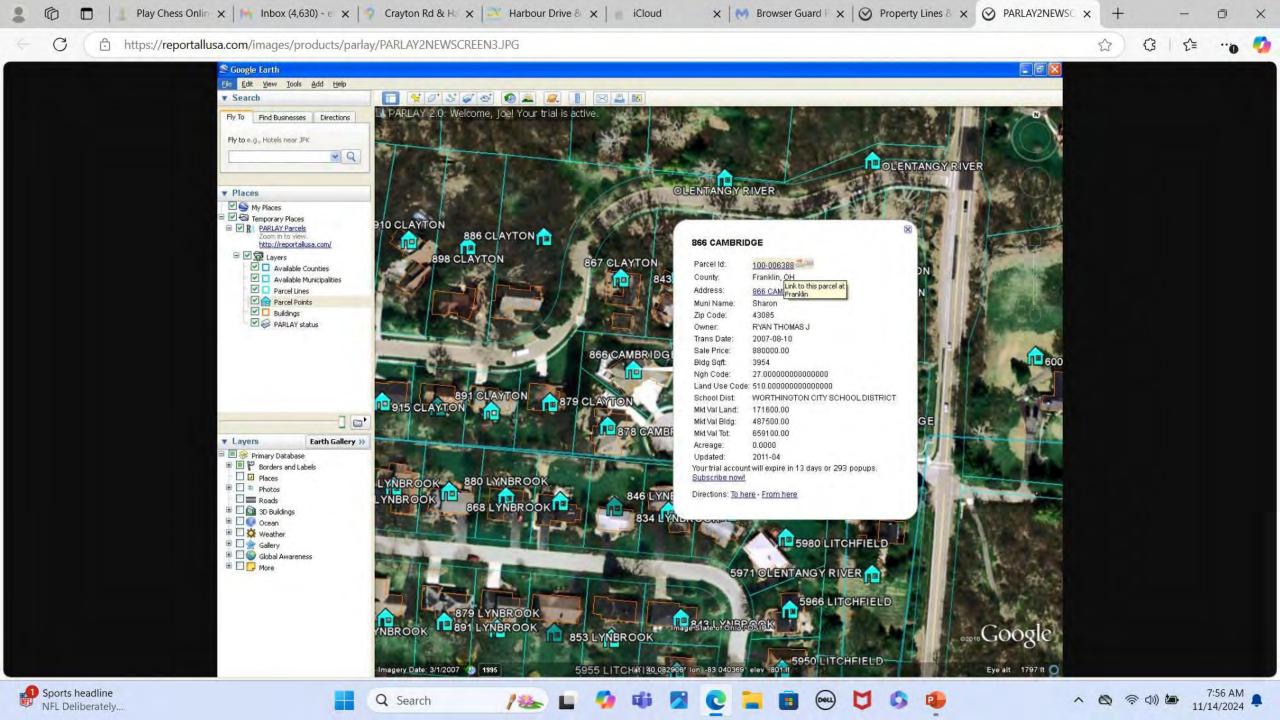


Nepaug SF PVP 8 Video: False Negative

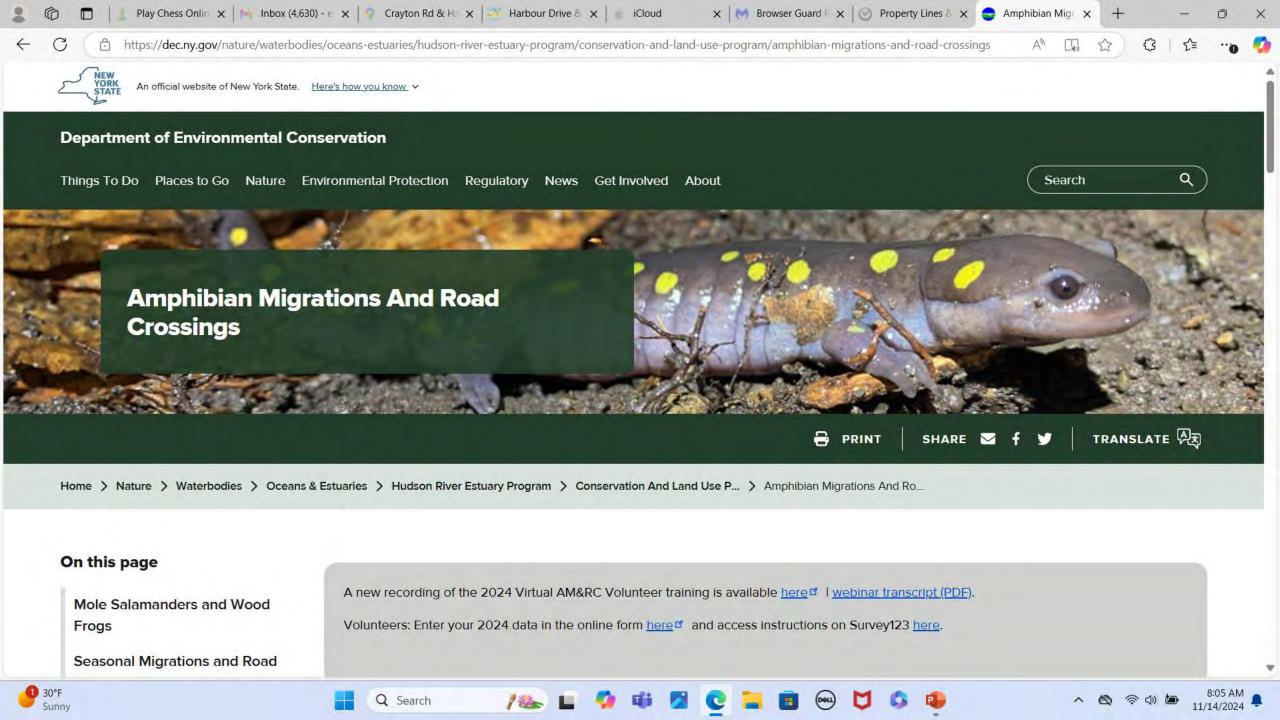
Adding Placemarks to Google Earth Pro (Middletown Photo)

Obtaining Parcel Data From Google Earth Pro



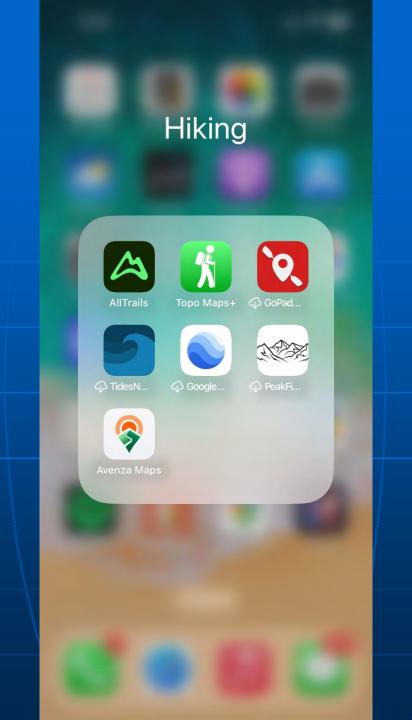


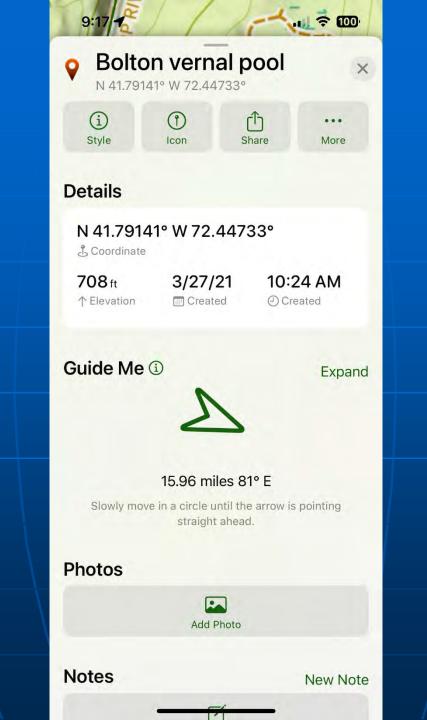
Using "Roadrunning" to Identify Potential Vernal Pools



Hoskins Road, Bloomfield

Finding the Needle in the Haystack: Topo Maps+





Summary

Google Earth Pro

- View Historical Imagery (3/2022)
- Tilt function
- Placemarks (longitude, latitude)

Parlay (or similar)

- Provides ownership, municipality, boundaries, etc. on Google Earth Pro

Topo Maps+ (or similar)

- Wayfinding feature

Roadrunning

- Direction of travel of migrating amphibians

Contact Info

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