



HerpMapper

Using HerpMapper

Mike Pingleton

We'll Cover....

- Overview of how HerpMapper works
- Setting up an account, downloading the app
- Using the mobile app
- Using the browser interface



HerpMapper Mission:

Assist in the conservation and understanding of the world's herpetofauna by collecting and sharing data



How Does It Work?

- Observational data is collected in the field, using mobile device app, browser
- Records are created from the data and are stored in the HerpMapper database
- Research and conservation organizations access the records in the database



What Does It Cost?

- No costs to contributors or data partners
- Volunteer-driven by committed IT developers, admins, curators, advisors, and others
- Operating costs covered by grants and donations
- HerpMapper in the process of becoming a 501(c)(3) nonprofit organization



Structure and Workflow: The Front End



- Data collection by the general public, field herpers, students, data partners
- One record per herp
- Citizen Science – Users agree up front to release all collected data

Structure and Workflow: The Back End



- Data Partners
- Accredited organizations doing research, education, conservation, etc.
- State herp atlases
- Partners can access data within the scope of their project
- 41 partners to date



Structure and Workflow: The Middle

- Secure database and servers
- Middleware – account creation, user profiles, tools for data collection, curation, partner export
- Documentation – FAQs and how-tos
- People – developers, curators, advisors, media relations



Data Collection

- Records can be added:
 - Via the mobile app for Android, IOS and Windows devices
 - Via browser at www.herpmapper.org
- Records require:
 - The common or scientific name of the herp (if known)
 - Geographic coordinates
 - One or more voucher photos (and/or audio file)
- HerpMapper automagically extracts some data:
 - Date, time & GPS from embedded EXIF data in digital photos
 - Using the pinpointed locality, HM determines country /state / region / municipality



Security

- HM users can only see details of the records they enter
- General public only sees basic information and photos – all specific locality data is blocked from view
- Images viewed by general public have EXIF data stripped
- Every database has administrators – HM admins have super user privileges, but not for the purpose of viewing records
- Data partners only have access to the subset of records defined by the scope of their project
- Partners can ask to have certain types of records completely hidden from view
- No partners have access to all records



Getting Started

1. Create an account at www.herpmapper.org
2. Get the mobile app (iOS, Android, Windows):
See www.herpmapper.org/mobile/mapper
for instructions

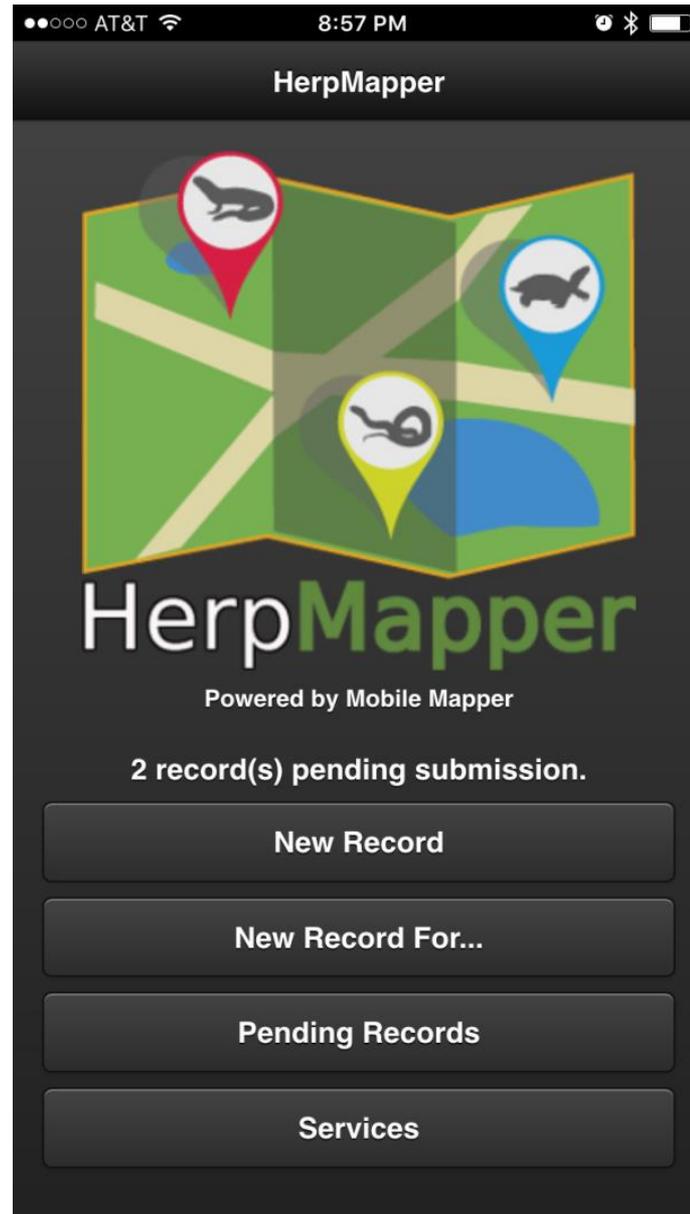


Using The Mobile App

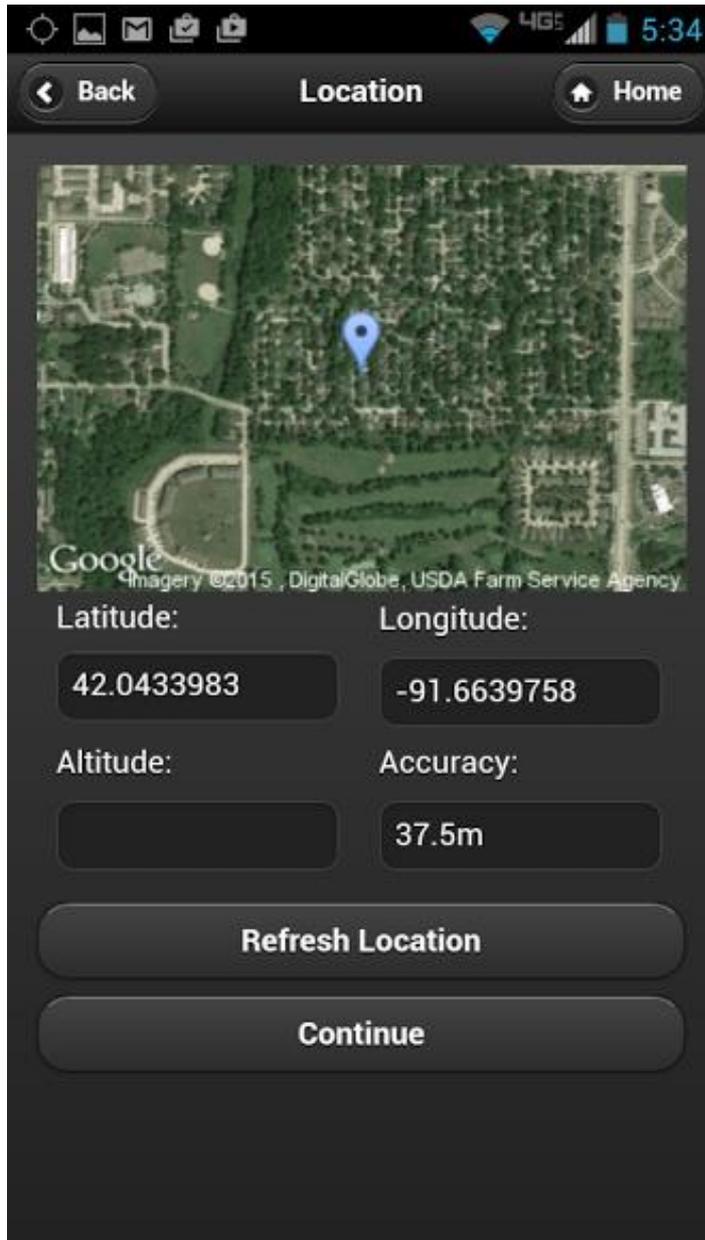
- Shoot first! Take a picture of the herp before opening HerpMapper
- Select the image from your camera roll when creating the record
- Your phone's GPS is working even in airplane mode, or when you don't have cellular service
- Upload (sync) to the HM database when convenient (and connected)



Mobile App Record Creation



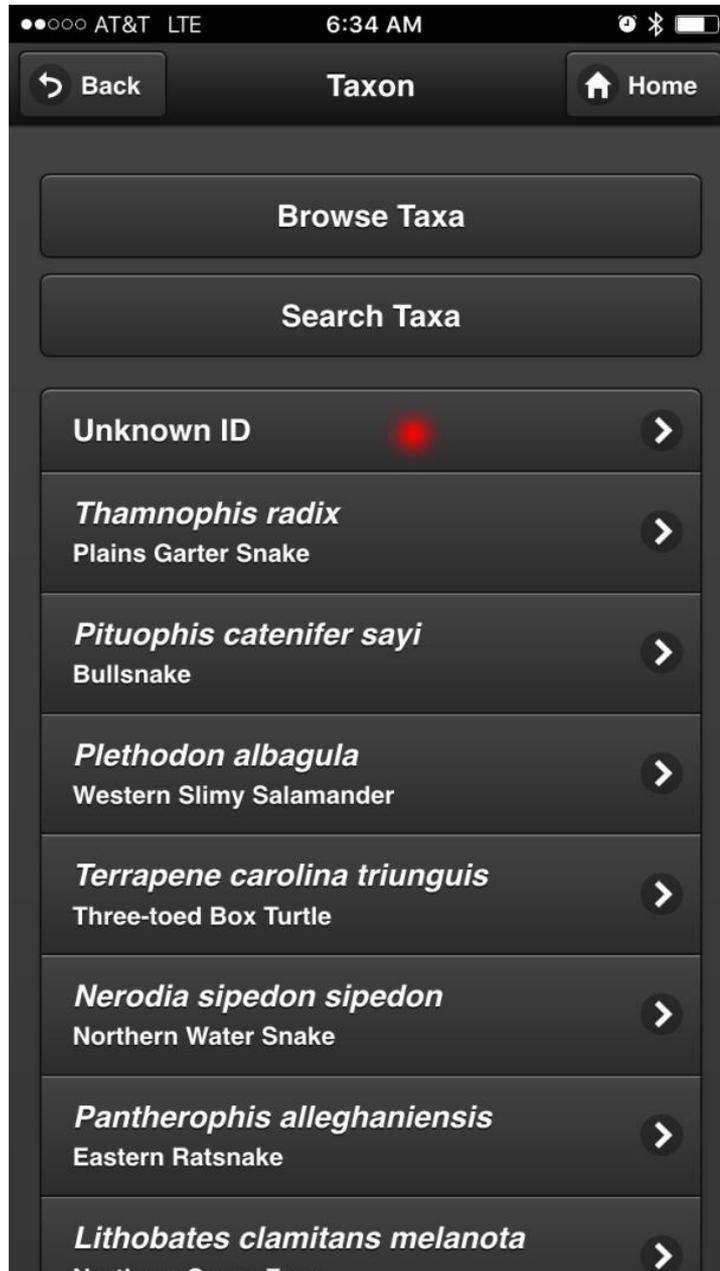
Set Location



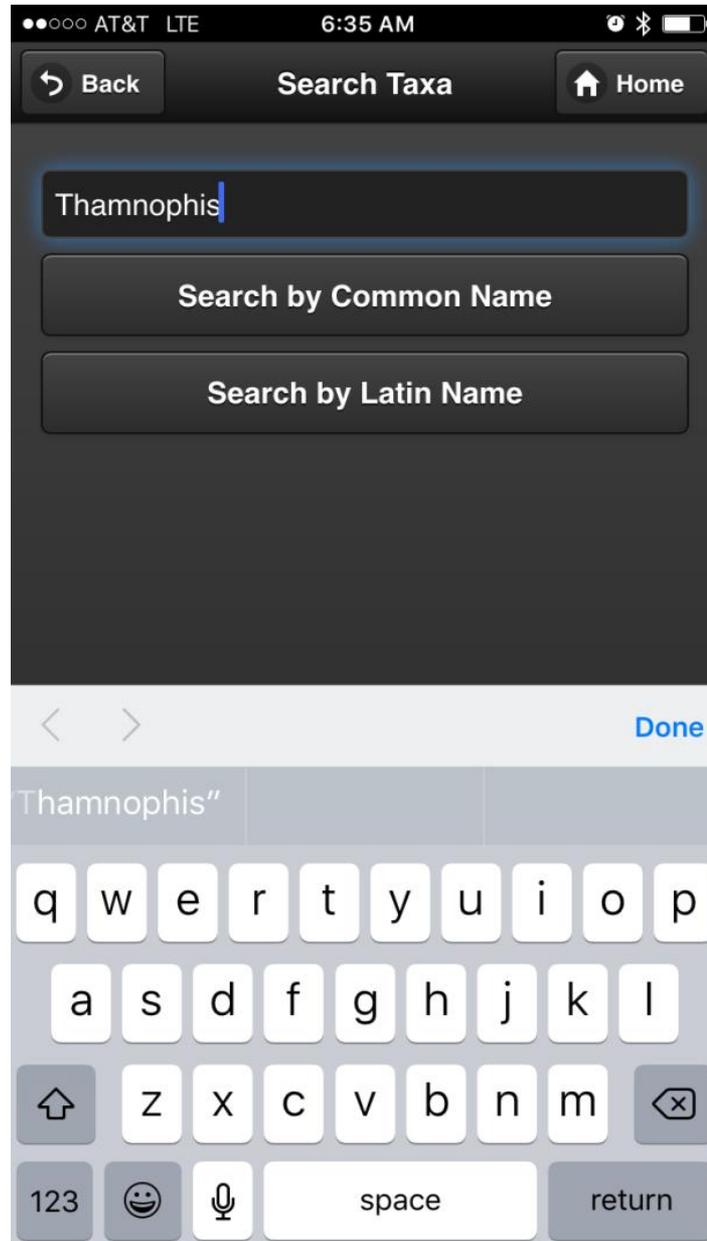
- Map will not appear when data service is not available
- Still displays lat, long, and accuracy fields



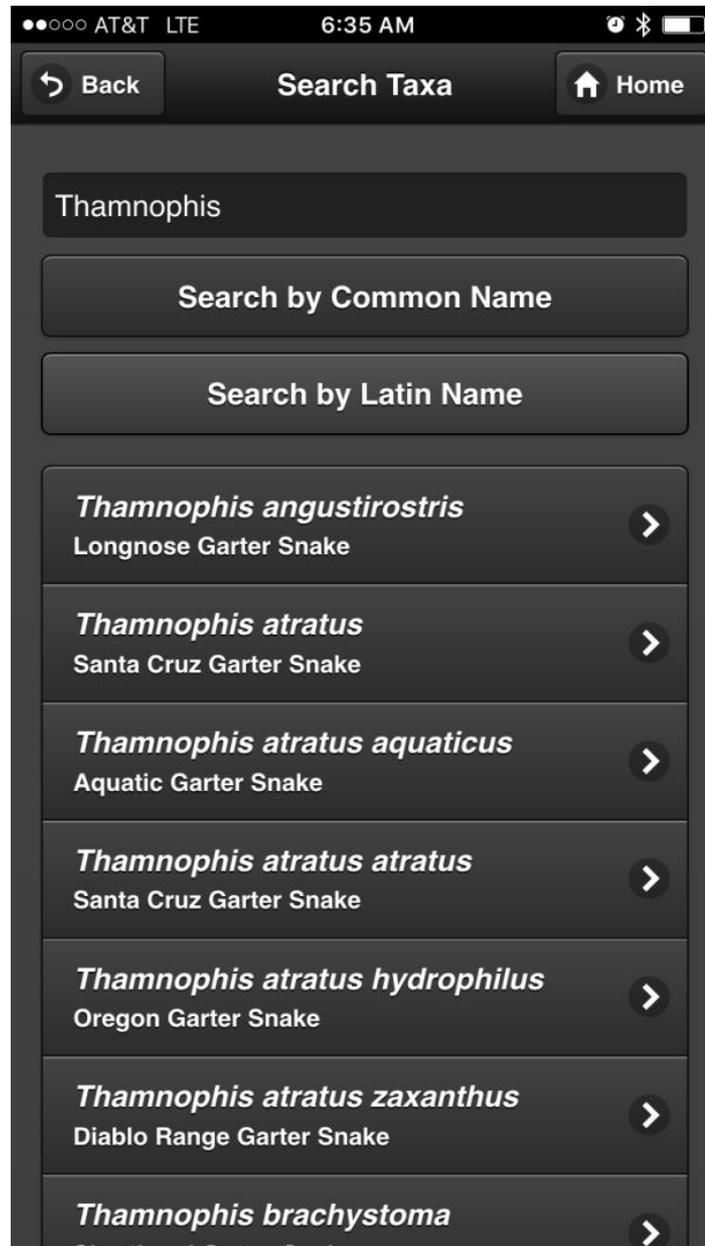
Taxon Selection



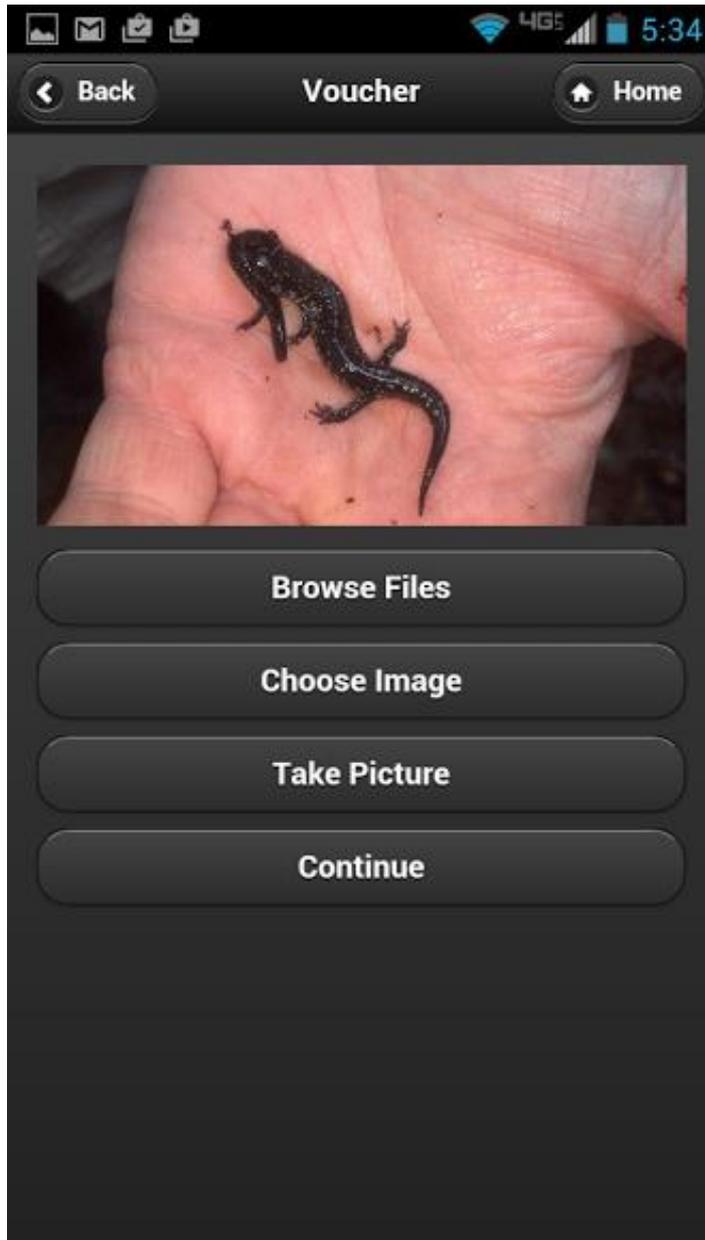
Taxa Search



Taxa Search Results



Select or Take Picture



- Audio files can be selected from 'Browse files'
- Audio currently not available with iOS

Add Data

Back Additonal Info Home

Age

Adult

Deceased

Public Notes

Private Notes

Hide this record from the public.

Continue



Ready to Save

Saving screenshot...

Back Review Home



Ocmulgee Slimy Salamander
Plethodon ocmulgee

Location: 42.043398 -91.663976
Accuracy: 37 meters

Age: Adult
Deceased: false
Public Notes:
Private Notes:
Hide this record from the public.: true

Save Record

Pending Records



- 'Sync Records' uploads from your phone to the HM database (requires service)
- Pending records can be edited before syncing
- Corrections / additions to records (additional photos, notes, etc.) can also be made via browser



Edit Pending Records

●●● AT&T LTE 10:19 AM

↶ Back View Record



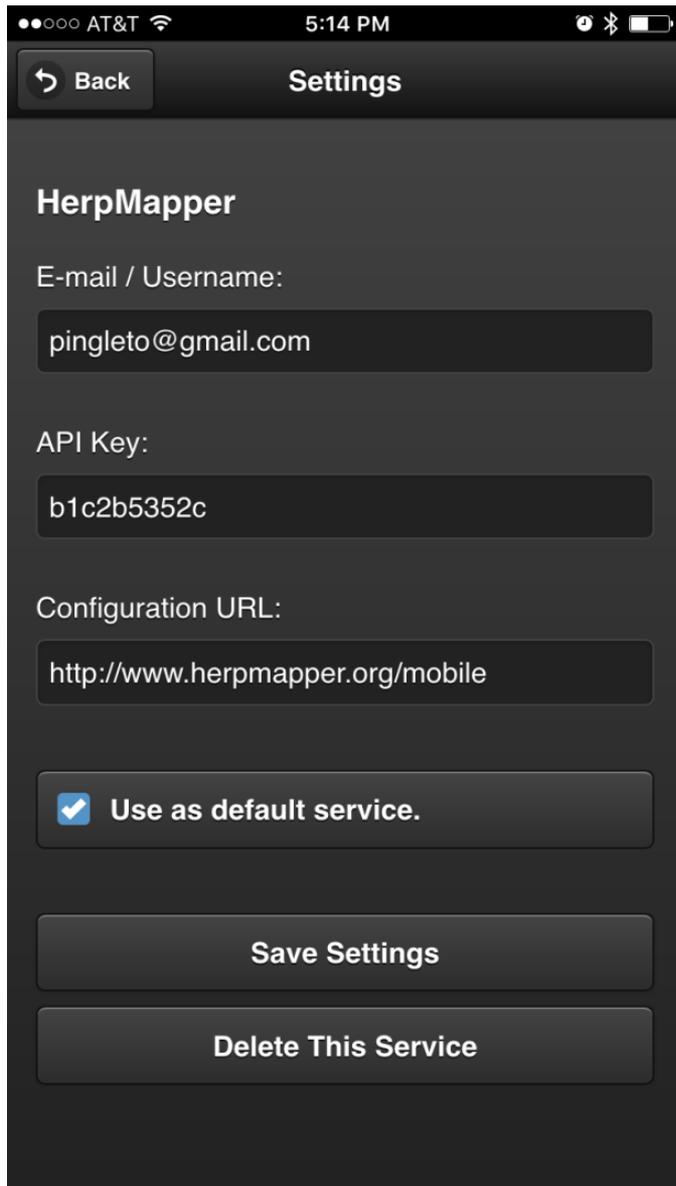
Plains Garter Snake
Thamnophis radix

Location: 40.120515 -88.263385
Accuracy: 65 meters

Age: Juvenile
Deceased: False
Public Notes:
Private Notes:
Hide this record from the public.: False

Edit Record

Services



AT&T 5:14 PM

Back Settings

HerpMapper

E-mail / Username:
pingleto@gmail.com

API Key:
b1c2b5352c

Configuration URL:
http://www.herpMapper.org/mobile

Use as default service.

Save Settings

Delete This Service

- API key
- Save Settings – uploads latest version, taxonomy updates, etc.



Using The Browser

The screenshot displays the HerpMapper web interface. At the top, a dark navigation bar contains the following items: a hamburger menu icon followed by 'Species List', an information icon followed by 'About', a location pin icon followed by 'Using HerpMapper', a gift icon followed by 'Donate', a gear icon followed by 'Tools', and a user profile icon followed by 'Mike Pingleton'. Below the navigation bar, there are three summary boxes: 'Last 7 Days' with the value '1,585', 'Last 30 Days' with the value '7,314', and 'Total' with the value '144'. To the right of these boxes, a dropdown menu is open, listing the following options: 'My Records', 'My Files', 'Upload Files', 'Add New Record', 'Shared Records', 'My Account', 'My Profile', 'Settings', and 'Logout'. Below the summary boxes is a large map of Europe with numerous colored circular markers (green, yellow, orange, red) indicating data points across the continent.

My Records

[My Account](#) / [My Records](#)[- Search options](#)

1 - 25 of 5,258 records

Taxon:	Country:	Level 1:	Level 2:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Start Observation Date:	End Observation Date:	Sort By:	Order:
<input type="text" value="YYYY-MM-DD"/>	<input type="text" value="YYYY-MM-DD"/>	<input type="text" value="Created"/>	<input type="text" value="Descending"/>

 Search synonyms*

* Only works when searching names spelled completely. No partial spellings.

[Clear](#) [Reset](#) [Search](#)**Tokay Gecko***Gekko gecko gecko*

HM 146591

Country: Thailand
Province: Bangkok Metropolis
District: Lat Krabang

Observed: 2016-02-20
Created: 2016-06-06
Modified: 2016-06-06

**Boie's Wart Frog***Fejervarya limnocharis*

HM 146589

Country: Thailand
Province: Bangkok Metropolis
District: Lat Krabang

Observed: 2016-02-20
Created: 2016-06-06
Modified: 2016-06-06

**Variable Agama***Calotes versicolor*

HM 146588

Country: Thailand
Province: Bangkok Metropolis
District: Lat Krabang

Observed: 2016-02-20
Created: 2016-06-06
Modified: 2016-06-06

**Long-nosed Tree Snake***Ahaetulla nasuta*

HM 146587

Country: Thailand
Province: Bangkok Metropolis
District: Lat Krabang

Observed: 2016-02-20
Created: 2016-06-06
Modified: 2016-06-06

My Profile



Mike Pingleton

I use antlers in all of my decorating.

Contributor since 2013



Badges



[Learn more about badges](#)

Observation Metrics

Total Observations	5258
Current Year	392

Most Recent Records

Some records may be hidden from the public



Tokay Gecko

Gekko gecko gecko

HM 146591



Boie's Wart Frog

Fejervarya limnocharis

HM 146589



Variable Agama

Calotes versicolor

HM 146588



Long-nosed Tree Snake

Ahaetulla nasuta

HM 146587



Long-nosed Tree Snake

Ahaetulla nasuta

HM 146586



Eastern Garter Snake

Thamnophis sirtalis sirtalis

HM 146578



Eastern American Toad

Anaxyrus americanus americanus

HM 146577



Midland Brown Snake

Storeria dekayi wrightorum

HM 146576

Most Recorded Species

Some records may be hidden from the public



Cottonmouth

Agkistrodon piscivorus

224 records



Common Garter Snake

Thamnophis sirtalis

127 records



Spring Peeper

Pseudacris crucifera

100 records



Slider

Trachemys scripta

93 records



Ringneck Snake

Diadophis punctatus

90 records



Racer

Coluber constrictor

84 records



Southern Leopard

Lithobates sphenopus

81 records



Gopher Snake

Pituophis catenifer

80 records

Uploading Files



Upload voucher files

Vouchers should be images or audio files of the actual animal observed (not photos of herpetologists in the field) and should be uploaded by conservation and research organizations that use HerpMapper data.

+ Add files...

Start upload

Cancel upload



Creating New Records

Voucher Files

 Create New Record

 Delete

Toggle All



Top Portion of a Record

[My Account](#) / [My Records](#) / HM 145697

Observer:

Pingleton, Mike

Country:

Thailand

Province:

Bangkok Metropolis

District:

Sathorn

Species:

Trachemys scripta elegans

Date:

2016-02-20

Time:

01:17:34

Latitude:

13.728749

Longitude:

100.542913

Altitude:

-3492.00

Accuracy:

meters

Datum:

WGS84

Coord. Source:

GPS

Age:

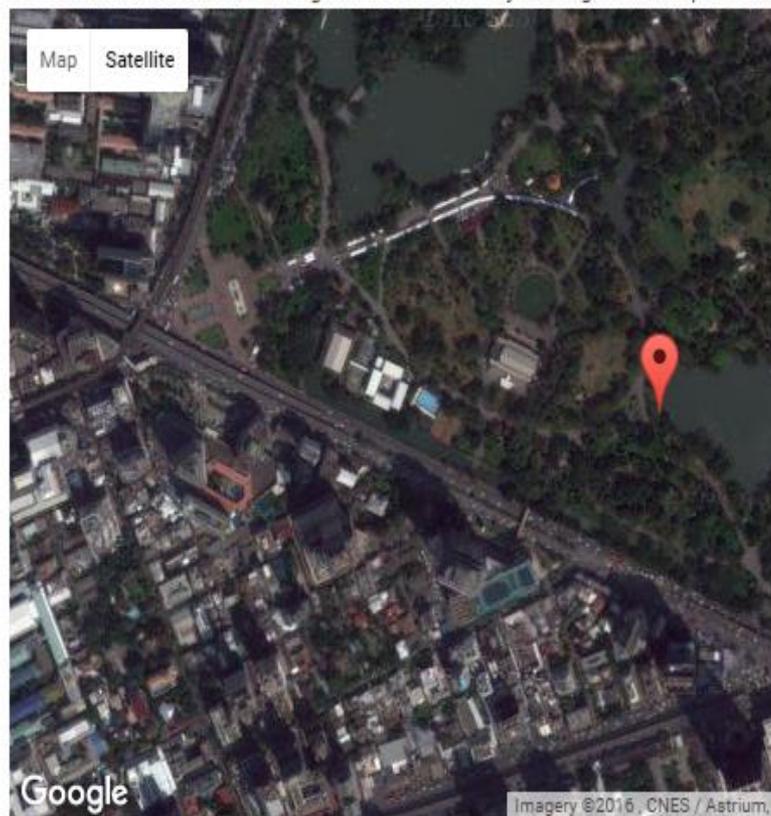
Adult

Deceased:

no

Hide this record from the public.

You can find the latitude and longitude of a location by clicking on the map below.



Bottom Portion

Additional Notes

These notes are viewable by the public. Do not put location information in these notes. If you need to describe a location, please put it in the private notes.

Lumphini Park.

Private Notes

These notes are only viewable to you and HerpMapper these notes.

Vouchers

Vouchers should be images or audio files of the actual animal observed (not photos from other observations or Google Images). Quality voucher files are important for conservation and research organizations that use HerpMapper data.



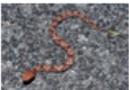
Save Record

Copy Time and Location

Flag for Review or Deletion

HerpMapper Fringe Benefits

- Portal to the world's herpetofauna
- See what others are seeing

HerpMapper		Species List	Using HerpMapper
	Triangle Treefrog <i>Dendropsophus triangulum</i> HM 48598	Country: Peru Department: Loreto Province: Maynas	
	Crested Toad <i>Rhinella margaritifera</i> HM 48597	Country: Peru Department: Loreto Province: Maynas	
	Northern Copperhead <i>Agkistrodon contortrix mokasen</i> HM 48596	Country: United States State: North Carolina County: Craven	
	Pine Woods Treefrog <i>Hyla femoralis</i> HM 48595	Country: United States State: North Carolina County: Craven	
	Western Leaf Lizard <i>Stenocercus fimbriatus</i> HM 48594	Country: Peru Department: Loreto Province: Maynas	
	Banded Centipede Snake <i>Tantilla supracincta</i> HM 48593	Country: Costa Rica Province: Limón Canton: Matina	
	Prairie Ringneck Snake <i>Diadophis punctatus arnyi</i> HM 48579	Country: United States State: Kansas County: Lincoln	

Practice Records

- Create test records via phone, browser
- Flag record for deletion when finished
- Admins will delete



www.herpmapper.org

- Sign up
- Record creation
- FAQs
- Instructions for mobile apps
- Species lists, Partner and project lists
- Record catalog, newest on top
- User profiles
- Social Media:
 - Like us on FaceBook
 - Follow @HerpMapper on Twitter
- Email us – info@herpmapper.org

