



Guide to Using the iNaturalist USFWS National Wildlife Refuge System Project

iNaturalist was developed for the general public to record and organize an individual's discoveries of the world's flora and fauna. The [USFWS National Wildlife Refuge System \(NWRS\) Project](#) in iNaturalist is a broad collection of verifiable species observations within the USFWS-NWRS boundaries and was created as a tool for USFWS personnel to compile, view and share species observation data. Verifiable observations are eligible for an iNaturalist "Research" grade when 2/3 of identifiers agree on a taxon identification. This resource provides crowd-sourced data and a location for personnel to store incidental observations and associated metadata (photos, sounds, date, georeference etc.) observed in the field. Due to the Data Policy Act, the project cannot be advertised or recommended for citizen science efforts. However, any iNaturalist members may join the USFWS-NWRS Project and contribute their observations, if they choose. This guidance will be specific to navigating through the NWRS project. Refer to the [iNaturalist help page](#) for additional guidance on the iNaturalist website.

1 Create an Account

The USFWS National Wildlife Refuge System Project data are easily viewed through a web browser without an account; however, observations may only be recorded and added by iNaturalist account holders.

- Creating an account is free. Visit iNaturalist at: <http://www.inaturalist.org/>
- From the main page, select "**Sign up**". Complete the fields to create the account.



The image shows the iNaturalist sign-up page. On the left is a large green bird logo. Below it, under 'Or you can...', are buttons for 'Sign in with Facebook', 'Sign in with Twitter', 'Sign in with Flickr', 'Sign in with Google', 'Sign in with Yahoo', and 'Sign in with SoundCloud'. To the right, under 'Join iNaturalist.org!', are input fields for 'Login / username' (with a note 'Only letters and numbers, no spaces, must be at least 4 characters long'), 'Email', 'Password', and 'Password confirmation'. Below these is a 'Your default time zone' section with a dropdown menu set to '(GMT-10:00) Hawaii'. A checkbox is checked with the text 'Yes, license my photos, sounds & observations so scientists can use my data!'. Below this is a link to 'Check this box if you want to apply a Creative Commons Attribution-NonCommercial license to your photos. You can choose a different license or remove the license later, but this is the best license for sharing with researchers.' At the bottom left of the form is a blue 'Sign up' button. A red arrow points from a red-bordered box containing the text 'Click "Sign up," once the form is completed.' to the 'Sign up' button.

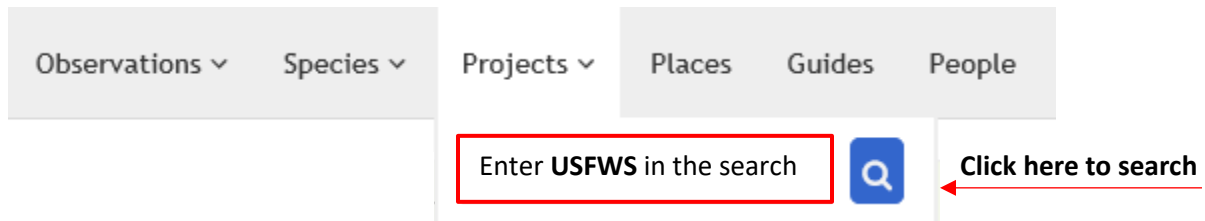
Congratulations!

The iNaturalist account is created and observations may be added to the project.

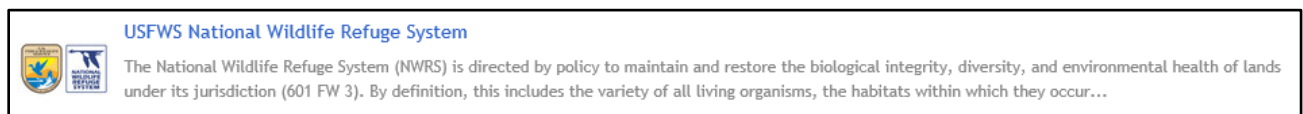
2 Joining the Project

Once logged in, access and [Join this project](#) by one of the following methods:

1. Visit the project through this link: <http://www.inaturalist.org/projects/usfws-national-wildlife-refuge-system>
2. Search for the project by hovering the mouse over “Projects” and placing the cursor in the search box. Enter **USFWS** and select the magnifying glass.



- Select the following Project:



3 Understanding the Rules of the Project

When joining the *USFWS National Wildlife Refuge System Project*, review the project rules to allow submission of the observation.

- Must be verifiable – observation needs evidence (photo or sound), a date, a location, and not marked as captive or cultivated. This will make the observation eligible for a “Research” grade.
- Must be observed within the boundaries of the U.S. Fish and Wildlife Service National Wildlife Refuge System.

If an observation does not follow the rules of the project, iNaturalist will prevent the observation from being added to the project.

4 Adding Observations From the Web

Adding observations to iNaturalist or to a specific project can be accomplished through various methods. Before proceeding, review the following help provided by iNaturalist to understand the concept of adding observations:


- <https://www.inaturalist.org/pages/getting+started#web>
- YouTube: https://youtu.be/0pi_9Y5WCP0

4.1 Add observations directly to the project from the project page


- Select “ADD OBSERVATIONS”




- An observation form specific to the project, will appear on a new page. Fill out all of the required fields that follow the project rules. Once complete, save the observation.

Add an observation to  **USFWS National Wildlife...**

Add: [Batch](#) · [From list](#) · [Import](#) · [From photos](#)

What did you see? 

☐ Was it captive / cultivated? ⓘ


When did you see it? 

(GMT-07:00) Mountain Time (▼)
e.g. "2017-06-08 15:15:34", yesterday at 4pm

Description


Tags Comma-separated, please

More fields ⓘ
Add a field Start typing field [View all fields](#)

Where were you? 


Name of the place you made the observation

Lat: Lon: [Edit](#)
Acc (m): Src:



Google Map data ©2017 Terms of Use

Change geoprivacy ⓘ

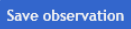
Add media 

Select one or more photos [clear](#)

☐ Sync obs. w/ photo metadata?

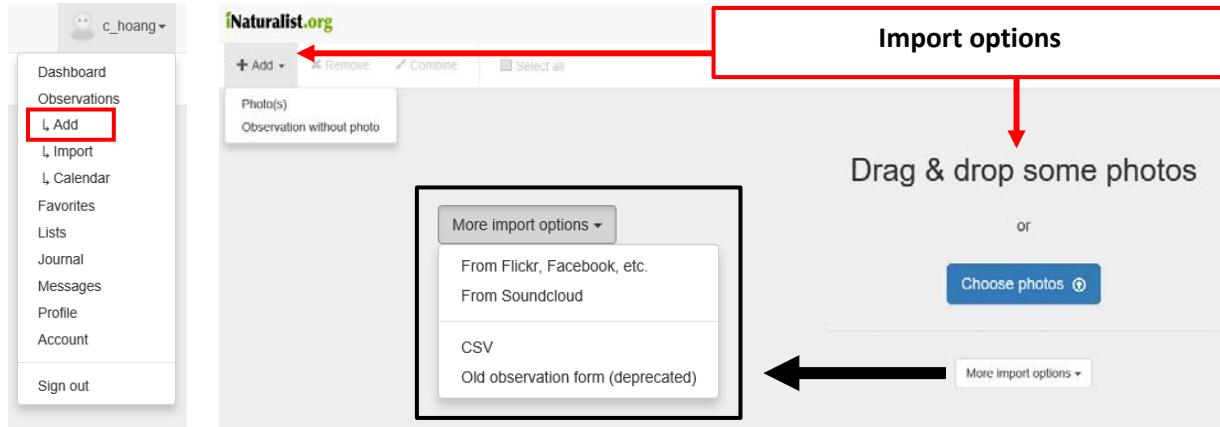
We also support [Flickr](#), [Picasa](#), and [Facebook](#) for image hosting.

[Link your Flickr account](#)
[Link your Picasa account](#)
[Link your Facebook account](#)



4.2 Add observations from the account drop-down menu

- Select “Add” from the account drop-down menu to import images and sounds
- After importing the evidence for the observation, a metadata observation form will appear and should be filled out with as much information as possible.



- Joined projects may be selected from the “Projects” field form. An Observation can be added to multiple projects if appropriate.

The screenshot shows the 'Editing 1 observation' form. The form is divided into two main sections: 'Details' on the left and a photo upload area on the right. The 'Details' section includes fields for 'Species name', 'Date', 'Location', 'Description', 'Location is public' (a dropdown), 'Captive / cultivated' (a checkbox), 'Tags', 'Projects', and 'Fields'. The 'Projects' field is highlighted with a red arrow. The photo upload area shows a photo of a coyote and a smaller version of the same form with fields for 'Species name', 'Date', 'Location', and 'Description'. A red arrow points from the 'Projects' field to the 'Projects' field in the smaller form.

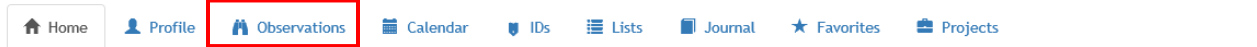
Joined projects may be selected from the drop-down list. If the desired project is unavailable, then the project has not yet been joined.

TIP: Adding saved observations (yours and others), may be added to a project at later time. Refer to **4.3: Add observations from “Your observations” or others**

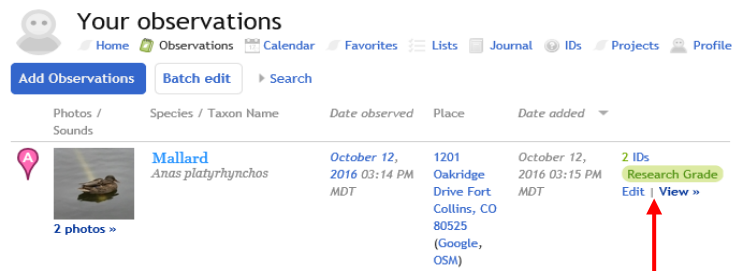
4.3 Add observations from “Your observations” or from others

Personal observations or observations from others may be added to any project as long it follows the project rules. Personal observations are viewed from the [Observations](#) icon on the homepage. Observations from others are viewed from the [Observations](#) drop-down option at the top of the iNaturalist website. This guidance will go over adding personal observations to a project; however, the process is the same for adding someone else’s observation.

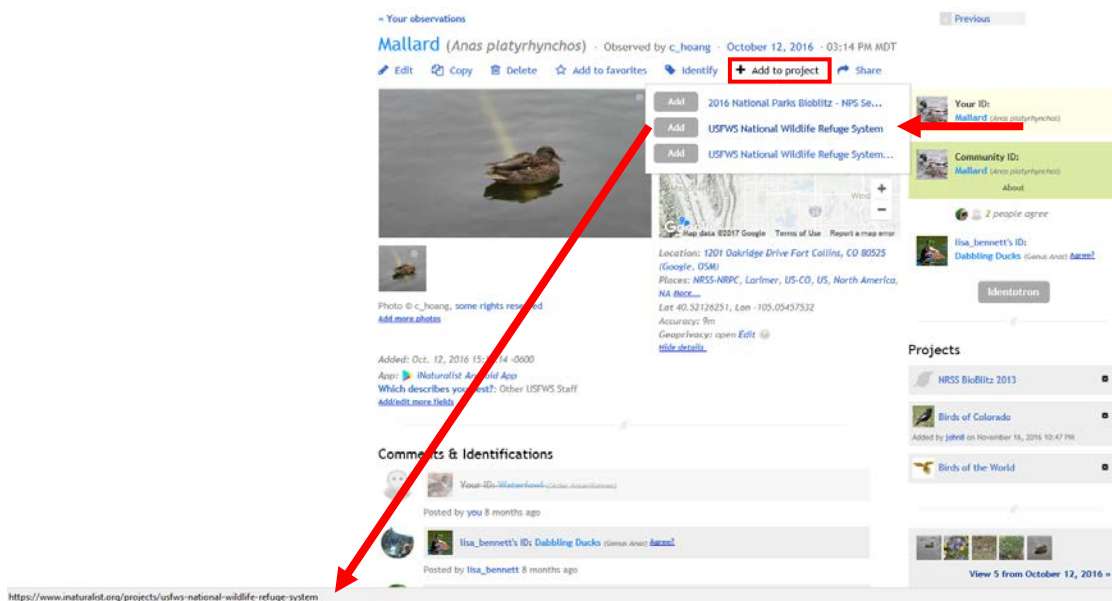
- From the homepage, select the “**Observations**” tab to view personal observations.



- All of the personal observations will be found on the “Observations” tab and may be viewed or edited at any time.
 - Edit – will allow the metadata to be updated or revised such as added photos and sounds, additional observation description, tags, etc.
 - View – will show the observation, comments and identification, associated projects, and quality grade



- From an observation view, select “Add to project” and “Add” the project of interest
- TIP:** If two or more projects have similar project names, scroll the mouse over the project name and view the website link found at the bottom of the internet browser.



5 Adding Observations From a Mobile Device

iNaturalist has provided guidance in using the iNaturalist mobile applications. View the following help and YouTube tutorials, related to the used device.

- YouTube: <https://youtu.be/xHGhJxCU46I>
- iPhone – <https://www.inaturalist.org/pages/getting+started#iphone>
- Android – <https://www.inaturalist.org/pages/getting+started#android>

6 Exporting Observations From a Project

Observations can be queried and data can be exported from personal observations, public observations, and project-associated observations. This guidance will detail exporting data from project-associated observations. Project members and non-members may export data from any project page.

- From the desired project page, under “**Export observations**” select “**CSV**” format

The screenshot displays two side-by-side panels representing the iNaturalist user interface for a 'Member' and a 'Non-Member'. Both panels feature a 'Members' section at the top, showing a row of five circular profile pictures (the first is a solid blue circle, the others are various nature-themed images) and a member count (1580 for the Member, 843 for the Non-Member). Below the member list, the Member panel has links for 'View all members', 'Your membership' (with 0 observations), 'Add from your observations' (with a download template link), and 'Export observations' (with Atom, KML, and CSV options). The Non-Member panel also has a 'View all members' link, but the 'Export observations' link is highlighted with a red arrow, indicating it is the focus of the tutorial.


- After selecting "**CSV**," options to query the data prior to export will appear on a new page and will display the following:


1. Create a query – can be used to query the observations within the project

1 Create a query

Create an observation query just like you would elsewhere on the site. You can also cut and paste an observations URL from another part of the site. You must specify a **taxon**, **place**, **user**, **project**, or **search query**.

quality_grade=any&identifications=any&projects%5B%5D=usfws-national-wildlife-refuge-system

Search 





























search all fields 

Filter by

☐ w/ photos
 ☐ w/ sounds
 ☐ out of range
 Quality grade
 ☒ any
 ☐ research
 ☐ needs ID
 Reviewed
 ☒ any
 ☐ yes
 ☐ no

Identifications
 ☒ any
 ☐ most agree
 ☐ some agree
 ☐ most disagree
 Captive / cultivated
 ☒ any
 ☐ yes
 ☐ no

Show only

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[Select All](#) [None](#)

Place

[clear](#)

Taxon

Observed on

Day 
 Month 
 Year 

Exact rank

User

[clear](#)

Project

[clear](#)

Project ID or URL slug, e.g. 333 or my-project

Taxon IDs

[clear](#)

Multiple taxon IDs separated by commas, e.g. 123,654

Date Range

[clear](#)

Max and min dates observed in YYYY-MM-DD format, e.g. 2015-01-17

Created on





[clear](#)

Date observations were created, not observed, e.g. 2015-01-17, 2015-01, 2015

2. Preview – a preview will appear based on the query specifications

2 Preview

1 - 30 of 340

Photos / Sounds	Species / Taxon Name	Observer	Date observed	Place	
  2 photos »	Blue Mud Dauber <i>Chalybion californicum</i>	sara39	June 11, 2017 01:08 PM CDT	Hagerman National Wildlife Refuge, Sherman, TX, US (Google, OSM)	Needs ID View »
 	Carpenter Bees Subfamily Xylocopinae	sara39	June 11, 2017 01:05 PM CDT	Hagerman National Wildlife Refuge, Sherman, TX, US (Google, OSM)	Needs ID View »

3. Choose columns – columns of the CSV export, may be selected on personal preference

3 Choose Columns

Choose the columns you want to export

Basic ([All](#) | [None](#))

<input checked="" type="checkbox"/> id	<input checked="" type="checkbox"/> observed_on_string	<input checked="" type="checkbox"/> observed_on	<input checked="" type="checkbox"/> time_observed_at
<input checked="" type="checkbox"/> time_zone	<input checked="" type="checkbox"/> out_of_range	<input checked="" type="checkbox"/> user_id	<input checked="" type="checkbox"/> user_login
<input checked="" type="checkbox"/> created_at	<input checked="" type="checkbox"/> updated_at	<input checked="" type="checkbox"/> quality_grade	<input checked="" type="checkbox"/> license
<input checked="" type="checkbox"/> url	<input checked="" type="checkbox"/> image_url	<input checked="" type="checkbox"/> tag_list	<input checked="" type="checkbox"/> description
<input checked="" type="checkbox"/> id_please	<input checked="" type="checkbox"/> num_identification_agreements	<input checked="" type="checkbox"/> num_identification_disagreements	<input checked="" type="checkbox"/> captive_cultivated
<input checked="" type="checkbox"/> oauth_application_id			

Geo ([All](#) | [None](#))

Town, county, state, country fields based on coordinates. Analogous administrative levels will be used for observations where these place types do not apply. The private_* fields will only be included when using the user filter and you are the user, or when using the project filter and you curate the project.

<input checked="" type="checkbox"/> place_guess	<input checked="" type="checkbox"/> latitude	<input checked="" type="checkbox"/> longitude	<input checked="" type="checkbox"/> positional_accuracy
<input checked="" type="checkbox"/> private_place_guess	<input checked="" type="checkbox"/> private_latitude	<input checked="" type="checkbox"/> private_longitude	<input checked="" type="checkbox"/> private_positional_accuracy
<input checked="" type="checkbox"/> geoprivacy	<input checked="" type="checkbox"/> coordinates_obscured	<input checked="" type="checkbox"/> positioning_method	<input checked="" type="checkbox"/> positioning_device
<input type="checkbox"/> place_town_name	<input type="checkbox"/> place_county_name	<input type="checkbox"/> place_state_name	<input type="checkbox"/> place_country_name

Taxon ([All](#) | [None](#))

<input checked="" type="checkbox"/> species_guess	<input checked="" type="checkbox"/> scientific_name	<input checked="" type="checkbox"/> common_name	<input checked="" type="checkbox"/> iconic_taxon_name
<input checked="" type="checkbox"/> taxon_id			

Taxon Extras ([All](#) | [None](#))

Note: these columns will slow down the generation of your export

<input type="checkbox"/> taxon_kingdom_name	<input type="checkbox"/> taxon_phylum_name	<input type="checkbox"/> taxon_subphylum_name	<input type="checkbox"/> taxon_superclass_name
<input type="checkbox"/> taxon_class_name	<input type="checkbox"/> taxon_subclass_name	<input type="checkbox"/> taxon_superorder_name	<input type="checkbox"/> taxon_order_name
<input type="checkbox"/> taxon_suborder_name	<input type="checkbox"/> taxon_superfamily_name	<input type="checkbox"/> taxon_family_name	<input type="checkbox"/> taxon_subfamily_name
<input type="checkbox"/> taxon_supertribe_name	<input type="checkbox"/> taxon_tribe_name	<input type="checkbox"/> taxon_subtribe_name	<input type="checkbox"/> taxon_genus_name
<input type="checkbox"/> taxon_genushybrid_name	<input type="checkbox"/> taxon_species_name	<input type="checkbox"/> taxon_hybrid_name	<input type="checkbox"/> taxon_subspecies_name
<input type="checkbox"/> taxon_variety_name	<input type="checkbox"/> taxon_form_name		

4. Create export – once the data query is complete and the columns for the export table are selected, the data may be exported

4

Create export

Recent Exports

Download	452 Bytes	June 12, 2017 10:30 AM	Query quality_grade= any &identifications= any @projects[]=usfws-national-wildlife-refuge-system Columns id, observed_on_string, observed_on, time_observed_at, time_zone, out_of_range, user_id, user_login, created_at, updated_at, quality_grade, license, url, image_url, tag_list, description, id_please, num_identification_agreements, num_identification_disagreements, captive_cultivated, oauth_application_id, place_guess, latitude, longitude, positional_accuracy, private_place_guess, private_latitude, private_longitude, private_positional_accuracy, geoprivacy, coordinates_obscured, positioning_method, positioning_device, species_guess, scientific_name, common_name, iconic_taxon_name, taxon_id
Download	35.6 KB	June 09, 2017 01:48 PM	Query quality_grade= any &identifications= any @projects[]=usfws-national-wildlife-refuge-system-bees-wasps Columns id, observed_on_string, observed_on, time_observed_at, time_zone, out_of_range, user_id, user_login, created_at, updated_at, quality_grade, license, url, image_url, tag_list, description, id_please, num_identification_agreements, num_identification_disagreements, captive_cultivated, oauth_application_id, place_guess, latitude, longitude, positional_accuracy, private_place_guess, private_latitude, private_longitude, private_positional_accuracy, geoprivacy, coordinates_obscured, positioning_method, positioning_device, species_guess, scientific_name, common_name, iconic_taxon_name, taxon_id
Download	35.6 KB	June 09, 2017 01:48 PM	Query quality_grade= any &identifications= any @projects[]=usfws-national-wildlife-refuge-system-bees-wasps Columns id, observed_on_string, observed_on, time_observed_at, time_zone, out_of_range, user_id, user_login, created_at, updated_at, quality_grade, license, url, image_url, tag_list, description, id_please, num_identification_agreements, num_identification_disagreements, captive_cultivated, oauth_application_id, place_guess, latitude, longitude, positional_accuracy, private_place_guess, private_latitude, private_longitude, private_positional_accuracy, geoprivacy, coordinates_obscured, positioning_method, positioning_device, species_guess, scientific_name, common_name, iconic_taxon_name, taxon_id

- Selecting the [Create export](#) icon will display the following message:

Exporting...



Loading...

Please be patient, this can take a few minutes. If this is taking too long, you can

Check Back Later

If you reload this page in a few minutes your export should appear in the list at the bottom of the page.

Receive an email with your data

You'll receive an email with your export as an attachment.

- When the export is complete, a confirmation and download button will appear at the top of the page

Export complete

Download	452 Bytes	June 12, 2017 10:30 AM	Query quality_grade= any &identifications= any @projects[]=usfws-national-wildlife-refuge-system Columns id, observed_on_string, observed_on, time_observed_at, time_zone, out_of_range, user_id, user_login, created_at, updated_at, quality_grade, license, url, image_url, tag_list, description, id_please, num_identification_agreements, num_identification_disagreements, captive_cultivated, oauth_application_id, place_guess, latitude, longitude, positional_accuracy, private_place_guess, private_latitude, private_longitude, private_positional_accuracy, geoprivacy, coordinates_obscured, positioning_method, positioning_device, species_guess, scientific_name, common_name, iconic_taxon_name, taxon_id
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7 Other iNaturalist NWRS Projects

Periodically, new taxa or species-specific projects may be created by the Natural Resource Program Center in the future and can be found on the [NWRS Project](#) under “**Other Projects**”. To add observations to other NWRS Projects, visit and join the affiliated projects by selecting [Join this project](#) .



8 Additional Resources

- [iNaturalist Frequently Asked Questions](#)
- [How to Geotag Hand-held Photos for iNaturalist](#)
- [How to Discover Observations in iNaturalist](#)
- [How to Identify Species in iNaturalist](#)
- [Introduction to Guides and Creating them in iNaturalist](#)