

Improving and Making Use of iNaturalist Data

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Intro

- [iNaturalist Help](#) and [Forum](#) are your friends
- [“Research Grade”](#) = has photo or sound, date, lat/long, community ID agreement, and isn’t captive or cultivated
- Getting records to Research Grade means they are much more likely to be used by others (only RG in GBIF export, photos for iNaturalist computer vision ID)

QC Tools

Identify

- Create an observation search
- Click Identify (e.g., [non-research grade Ragwort from Oregon iMap collector](#))
- Lock zoom level is helpful
- View keyboard shortcuts by pressing [?] on your keyboard
- Use <- -> to move forward/backward through obs
- Alt+<- and Alt+>- scrolls through multiple photos
- [Z] zoom photo
- [A] to agree with highest-order ID
- [I] to add a new ID
- Click top-left species name to open full record

Data Quality Fields

- View in full record (scroll down) or Data Quality tab in Identify tool
- “Organism is wild” is an important one – mark as NO for garden plants, zoo animals, etc.
- Location is accurate – sometimes people clearly have mapped things incorrectly (plant in the ocean, alpine species in an urban area)
- “Can ID still be confirmed or improved”? if something seems like it should be research grade but isn’t (lots of agreements on ID) check here, if ‘Yes’ is ticked, click ‘No’ and it should flip to Research Grade
- If you think the observer can fix an issue, add a comment and @ their username to alert them

Annotations

- Phenology, life stage, etc.: create [neat histograms](#) and can be used in searches via URL terms
- Annotations are not exported but [can use custom search URLs](#) to export just those observations of interest -e.g. [annotation URL help](#)
- [Example of Milkweeds in Oregon with “flowering” annotation](#)

Downloads

Export from iNaturalist observation search

- Access from the Filter button, Download link at bottom right
- When starting from Obs Search your search parameters will be populated
- Tick on/off any additional parameters
- Fields: will display ones you have added to observations
- Creates a .csv which you can use in Excel or import to database etc.
- To create a spatial layer, import to mapping software and use latitude and longitude fields as Y and X coordinates of points. Projection is WGS84, EPSG code 4326

Obscured Coordinates

- This could be its own workshop – but the gist of how to access these is on [iNaturalist Help](#)
- Basically, you need permission from the observer to get true locations for obscured observations. Either via [their relationships](#) or if they join your project and grant the project access.

GBIF Export

- Research-grade re-usable observations [exported weekly](#)
- You will get slightly different fields than a direct iNaturalist export
- Preferred method for very large (10s of thousands + of records) exports

Creative Commons Licensing

- each observation has its own [license](#), and each photo or sound has its own as well
- [GBIF export](#) only includes those licensed for re-use (CC-0, CC-BY, CC-BY-NC)
- Be particularly wary of “[non-commercial](#)”. In general, if your *primary* use of the record (or image or sound) is *not for commercial gain*, should be OK.

Citing iNaturalist

- [Always cite iNaturalist](#) if you are using their site or their data in a presentation, report, or publication
- When citing individual observations, or reusing photos or sounds, for licenses that include CC-BY you need to cite the observer
- Website in general: iNaturalist. Available from <https://www.inaturalist.org>. Accessed [date].
- GBIF: Ueda K (2021). iNaturalist Research-grade Observations. iNaturalist.org. Occurrence dataset <https://doi.org/10.15468/ab3s5x> accessed via GBIF.org on 2021-10-20.