

City Nature Challenge 2021 important dates:

- Make and share observations: April 30 May 3
- Get all your observations uploaded and work on identifying: May 4-9
- Results announced: May 10

How has the City Nature Challenge changed in light of COVID-19?

Please refer to our <u>COVID-19 FAQ</u> page for details, where we will update what the City Nature Challenge will look like for 2021. No matter what, be sure to follow all local guidelines about COVID-19 in your city.

When can I start making observations that will count for the City Nature Challenge? When should I stop?

All observations made starting on April 30 at 12:00am YOUR LOCAL TIME and up until May 3 at 11:59pm YOUR LOCAL TIME will count for the City Nature Challenge.

Can I upload photos during the CNC that I took prior to the CNC?

No, only observations made during April 30 - May 3 will count for the City Nature Challenge.

Do I need to join the project and add my observations to it for them to be included?

No. All observations that are made within the boundary of the project between April 30 - May 3 will automatically get pulled into the project - YOU DO NOT NEED TO ADD YOUR OBSERVATIONS TO THE PROJECT. You're welcome to join the project though - that way you'll get notifications about News posts that are made, and the project will be listed on your observations that get aggregated into it.

How can I make sure my observations are in my city's CNC project?

If your city is using iNaturalist, the easiest way is to go to your city's project, click the "Observers" tab, and look for your name there! If you've joined your city's project, you can also look at your individual observations and you'll see your city's project listed under the "Projects" sidebar.

What kinds of observations should I make during the CNC?

Any observations of WILD plants, animals, fungi, seaweed, bacteria, lichen, etc. you find in and around your city! Observations of living or dead organisms, or evidence of those organisms, like shells, tracks, scat, feathers, etc., are fine. Remember to make sure you're taking good photos of the organisms!

What if I make an observation of something I know isn't wild? Will it still count for the CNC?

Yes, as long as you're not making a lot of these observations, most cities will include observations of non-wild organisms during the CNC. However, it's VERY IMPORTANT TO MARK THOSE OBSERVATIONS AS CAPTIVE/CULTIVATED. Please be a good community member and data steward by marking any observation that you know for sure is not wild as captive/cultivated - in iNaturalist, there's a field for it in the app when you make an observation. This includes pets, animals in a zoo/aquarium, plants in your garden, potted plants, plants at a botanical garden, etc. Here's a very short video on how to mark observations as captive/cultivated.

What if I don't know what the organism is that I took a picture of? How do my observations get identified?

No problem! You don't have to know what species it is you took a photo of - you just need to take a good enough photo (or photos) that it can be identified (see <u>tips for taking good photos</u>). There are a couple ways you can get your observations IDed:

1. iNaturalist has Computer Vision/Artificial Intelligence (AI) built into it, and when you make an observation with the app or upload an observation on the web, as long as you have connectivity iNaturalist will give you suggestions about what it thinks you just took a photo of, and you can choose one, especially if it says "Visually Similar" AND "Seen Nearby". Because this functionality is built on observations that other people have

- already made, in some places (like North America) these suggestions are likely to be correct, and in other places (like Africa and Asia) these suggestions are likely to be wrong. Click here to see tips on when you should or shouldn't use these suggestions. If none of the AI suggestions seem correct, you can type in your own identification using the search bar, at any level of detail you know (e.g., "California poppy" or "Plants" are both fine to use as an ID!)
- 2. Once you upload an observation it can be seen by the entire iNaturalist community, and this is true for many of the other platforms being used by cities. The community can agree with the ID you made, help refine an ID to get it to species level, or correct a mis-identification. Remember though, you need to have taken a good enough photo (or set of photos) that other people can ID the organism you saw! It's important to remember that all identifications on iNaturalist are made by other users who are all volunteering their time to identify observations; there are no iNaturalist staff members who are paid to add identifications.

Do I have to make observations using the app? What if I want to use a real camera?

For iNaturalist, while it's convenient to use the app to make observations, it's fine if you want to use a real camera. You can upload your observations using the Upload tool on iNaturalist, and if your camera doesn't have a GPS, you can drop a pin to indicate where you made each observation. If you're planning on making most of your CNC observations using a camera, we recommend watching this short video on how to best use iNaturalist's Photo Uploader.

What about if I see something but didn't get a photo of it - can I still make an observation? We get it - sometimes a cool bird or butterfly flies by without stopping and you just can't get a picture. Yes, you can make observations in iNaturalist and most other platforms without a photo, and most cities will allow observations without photos for the CNC. However, please do this sparingly, and only if you know for sure what the species was, since no one can help ID or confirm an observation without a photo.

Where can I see how my city is doing?

Potentially in two places, depending on what platform your city is using to gather observations. The <u>City Nature Challenge website</u> has a list with all the cities, but the numbers are not real-time for some cities. Cities using iNaturalist can see how they're doing in real-time in the <u>City Nature Challenge umbrella project</u>. Remember that this year the results will be the collaborative effort of everyone around the world - the CNC is no longer a competition.

Someone added an ID to my observation - should I agree with it? What if I don't agree with it?

An identification confirms that you can confidently identify it yourself compared to any possible lookalikes. Please do not simply "Agree" with an ID that someone else has made without confirming that you understand how to identify that taxon. If you agree with the ID without actually knowing the taxon, it may reach Research Grade erroneously.

If you disagree with an identification, the best thing to do is to add an identification of your own. It's helpful to provide a reason for disagreement in a comment. If you think you had the correct identification before the other person added theirs, then it's useful to write a FRIENDLY comment explaining why you think your ID is correct.

How do observations in iNaturalist become Research Grade? Do my observations have to get to Research Grade to count for the CNC?

To get an observation to "Research Grade" status: (1) it must have a photo, (2) it must have an accurate date and location, (3) it cannot be a captive or cultivated organism, and (4) over 2/3rds of the people adding IDs to it have to agree about what species it is. It's key to check back on your observations after you make them to see if anyone has added an identification or left a comment, possibly asking you to provide a bit more information about what you saw. Click here to learn more about Research Grade.

All observations will count for the CNC, even those that are not Research Grade.

I took so many photos during the CNC that there's no way I can get them all uploaded before the end of the day on May 3 - what should I do?

Relax! Luckily we have a week - up until May 10 at 9am YOUR LOCAL TIME, where you can work on uploading all the observations you made during April 30 - May 3. They'll still get added to your city's CNC project, as long as they were made in the April 30 - May 3 window.

Can I help identify what people found during the CNC? What if I'm not an expert in anything?

Yes! In the same way that anyone can be an observer, anyone can help identify observations. In iNaturalist, go to your city's project, click "Observations" and you'll see an "Identify" button pop up just below it. Clicking this will take you to the iNaturalist Identify page and show you all of your city's observations that still need to be identified. From this page, you can restrict what it shows you by taxon, which helps if you know how to ID certain groups. If you're not an expert in any group, you can still help by identifying the "unknowns" - the observations with no IDs at all! Click the "Filters" button and then select the dashed-line leaf with a question mark in it:



This will show you all the observations that are currently listed as "unknown." It's really helpful to go through these and add high-level IDs like "plants" or "insects" or "birds" or "fungi" -

whatever you know about the organism - so people who do know how to ID these groups down to species can find them! Here's a short video about using the Identify page.

No matter what, please only add an ID of which you can be reasonably sure - it's fine if you don't know what something is, and it's fine to only add a genus or family or even kingdom level ID.

If you want to help identify observations from any city - great and thank you! <u>Click this link to go</u> to the <u>Identify page for the entire City Nature Challenge</u>.

On iNaturalist, why is the species number different in my city's project vs. in the umbrella project? Which one will count for the results?

We use the numbers in each city's project, so you can think of it as branch tips (or "leaves") - if there are observations identified to a genus but nothing in that genus is IDed to species, then the genus itself will count as a "species." If there are observations identified to a family but no observations IDed to a genus or species in that family, then the family counts as a "species." This is how "species" are counted in collection projects.

If you look at the umbrella project for the CNC, the species count for each city is lower, because the umbrella project is only counting actual species.

But for the CNC itself, we will use the "species" number from each city's project as we compile results from each city.

For the overall collaborative results, we will use the number in the umbrella project.

When are the results announced?

The results for YOUR CITY will be whatever the numbers are in your project on Monday, May 10 at 9am YOUR LOCAL TIME. It takes almost 24 hours to get the numbers from all the cities, since our cities in New Zealand and our cities in Hawaii are 23 hours apart by time zone. So the very last cities to hit 9am on Monday May 10 are in Hawaii. Results will be announced within 2-3 hours of that time, around 2pm Pacific time.

What are the data used for?

On iNaturalist, all the data are freely available to anyone interested in downloading them. iNaturalist observations are used in hundreds of scientific publications. Many of them are using data that is shared with the Global Biodiversity Information Facility as part of the iNaturalist Research-Grade Observations dataset. You can browse the ongoing list of the publications that have cited a GBIF dataset containing at least one record from iNaturalist.

However, we usually find the most immediate use of CNC data happens at a local level: a discovery of a new-to-that-place species, someone documenting a population of a rare or invasive species that wasn't previously known, better understanding of where particular species are in that area, etc. So any local governments, parks departments, or other organizations who track biodiversity/invasive species/rare species in the area that are involved in the City Nature Challenge will likely use the data produced to make more-informed management decisions.

How can I share about the City Nature Challenge on social media?

Tag any post with #CityNatureChallenge! You can also tweet at us: @citnatchallenge. This year we're also encouraging people to take a #CNCNatureSelfie so we can see you looking for nature in & around your home!

Tips for Taking Photos During the City Nature Challenge

The photos you take during the City Nature Challenge are there to provide evidence of the organism you saw, and to help confirm the identification of that organism. Therefore, taking good photos is key to participating in the CNC! Here are some tips to taking photos:

- Focus on one species in each photo: While a meadow full of wildflowers is beautiful, it's not the best photo for an observation, as there are probably many species represented in that one shot! As much as possible, try to have the one species you're interested in as the focus of your photo, by getting close and centering your organism in the frame.
- Use the option to have multiple photos in one observation: On iNaturalist and on some
 of the other platforms, you can have more than one photograph for each observation
 you make, allowing you to photograph different parts or angles of an organism. For
 example, one photograph of an entire tree, taken from far away, won't be very useful in
 identifying that species of tree, but that "full shot" photo, combined with other photos
 that show close ups of the leaves, the bark, and any flowers or fruits, will allow that tree
 to be identified.
- Discard blurry photographs: Be sure to use the option to retake photos when making observations! If the organism moved or there is low light, causing the photograph to be blurry, retake the picture but wait for the organism to be still or turn on your flash. On iNaturalist, the app will show you the photo you took and ask you if you want to retry or if you're OK with the photo.
- Get close: For small organisms in particular, like ants or aphids, getting a nice close-up shot is important for identification. While it can be difficult to take a good close-up shot using the camera of a smartphone, these days there are inexpensive clip-on macro lenses you can use with your phone to take great, focused pictures of small organisms or

close-ups of features of other organisms, like a plant that has tiny flowers or the eyes of a spider.

Tips for Using the iNaturalist Computer Vision/Al

The Computer Vision/Artificial Intelligence (AI) on iNaturalist is a fun and useful feature that can provide real-time feedback about the observations you're making. The iNaturalist AI will give you suggestions for ID, but they're just that—suggestions. Because of this, there are some things to keep in mind to make sure you're using the AI in the best and most responsible way:

- Check how confident iNaturalist is in the suggestions: The iNaturalist AI will never give you one single suggestion of one species. Instead, based on the photograph you provided and how much information it has about the species in your area, it will offer a list of suggestions, with some information about how confident it is in these suggestions. If it has confidence in the list of suggestions, it will always display a taxonomic level higher than species at the top of the list and say that it is pretty sure your organism is in that group. Then it will list ten species suggestions. If it is not confident in its suggestions, it won't display a higher taxonomic level and will state that it is not confident enough to make a recommendation. It will still display ten species suggestions, but those suggestions will likely encompass a wide range of organisms that look somewhat similar to your photograph. We recommend only choosing a species suggestion if the iNaturalist AI is "pretty sure" about the ID.
- Look for suggestions that are visually similar and seen nearby: If the iNaturalist AI is
 "pretty sure," look through the ten suggested species. Under each species name, it will
 state why the AI is suggesting it: if it is visually similar, if it has been seen nearby, or if it's
 visually similar and has been seen nearby. Suggestions that are listed as visually similar
 and seen nearby are the best choices!
- Learn more about the suggested species: In the list of suggested species, you can see the name of the species as well as a tiny thumbnail, which can make it difficult to tell if a suggested species seems like the correct ID to your observation. All of those suggestions, though, link to a species information page, where you can see larger photos, read about the species, and see a map of where others have observed it. If it seems like you've found a match to your organism, you can even select it as the ID from within the species page.
- Make your own ID: If, after going through all the tips above, you don't think you've found a likely suggestion for your observation, you can always enter your own ID by using the search bar. If you know the species, you can type in a species ID, but you're also welcome to make an ID at a much higher level, for example "plants" or "birds" or "beetles." By putting at least some level of identification on your observation, you make

it much easier for other iNaturalist members who can help refine that ID to find your observation, rather than leaving it blank.