

## ***Citizen Science lets us add to knowledge, connect with others, learn and be productive, engage children, experience nature, and more.***



Citizen scientists can collect, analyze, and share important information about our world. People everywhere are contributing to understanding of everything from bird biodiversity to health challenges and exploring space. With many people taking part, overwhelming tasks get done and vast amounts of information is collected and pooled at low cost. We learn and enjoy while helping solve problems and make discoveries!

### ***Want to get involved, contribute, and learn? Here are some ways!***



**For bird enthusiasts: [Merlin](#) helps you identify a bird by looks or sound.**

With this free cell-phone app, you can zero in on bird ID from a photo or a set of simple questions. Even if you don't see the bird, Merlin uses artificial intelligence to ID its calls and show you a picture! Merlin doesn't directly build data, but lets you build your knowledge.

**[BirdNET](#), another free app, IDs bird calls and contributes to broader knowledge.**

It sends your recordings to a central database and asks whether you agree with its AI guess. This builds records of where and when birds are found. You see and record a spectrogram of the sounds you hear -- and use that to build your own sound library or contribute to other projects.



**Make observations and contribute to biodiversity science using [iNaturalist](#).**

With this free app, developed by Bay Area graduate students and now used worldwide, artificial intelligence and volunteer experts help identify plants and animals from photos or sound, usually via your mobile phone. Confirmed by others, your uploads become data used in many ways -- from discovering new species to tracking what lives in local areas and how this changes. (Friends of Five Creeks has several such projects.) **[Seek](#), a free companion app, is more popular among beginners.** It gives you a quick, pretty good AI guess on ID, offers badges and game-like challenges, but does not automatically build knowledge.



**[CalFlora](#), a statewide database on native and invasive plants, requires some expertise.**

If you can accurately identify California plants, you can contribute much more information -- on numbers, area, habitat, stage of life, and much more. CalFlora's pictures and information are open to all, but to maintain quality, contributors should be reasonably knowledgeable.

**Choose from a vast collection of projects with [SciStarter](#).**

SciStarter connects you to over a thousand citizen-science opportunities nationwide, with easy searching by topic, location (including virtual projects), age groups, time required, and even goals like health or reducing poverty.



Projects range widely. With searching, you can zero in on something that meets your needs and makes a real contribution.



**Participate in scientific research projects online with [Zooniverse](#).**

Zooniverse lets you search for planets, map deep-sea corals, count penguin eggs and chicks, or delve into climate change over millions of years, all from your own computer! Chat opportunities build community among volunteers from around the globe. California projects let you track change over time by transcribing handwritten labels on [plant specimens](#) or [insects](#) (for UC Berkeley's [Essig Museum](#)).