



CITIZEN SCIENCE PROGRAM

Migratory Birds Project

2018 Field season

DATES

- February 4-16, 2018
- April 18-30, 2018
- May 7-19, 2018

From February through April, we will be observing both migratory species as well as resident ones. Throughout May, migratory species will be leaving the area.

SUMMARY

During the twelve days of field work, we will focus on mist netting and banding birds as well as conducting surveys in the different habitats within the reserve. The data we collect will allow us to monitor how bird health and population sizes fluctuate over time and guide our management decisions.

Other activities will be incorporated into the field activities that support other ongoing bird-related projects at the reserve that include:

- 1) continuing to update the reserve's bird list with species sightings;
- 2) recording bird calls and photography for digital field guides/resources we are developing for students, scientists and volunteers working at the reserve. In addition, building a sound library will make it possible for us to train volunteers for point counts and occupation model surveys.
- 3) observing feeding in the field along with germinating seeds collected from birds to determine their diets as part of an effort to promote planting bird friendly species in yards in our local community as an alternative to exotic ornamentals. We photograph seeds for the digital collection being created.
- 4) recording bird activities in the field to understand how various weather events affect bird activities and behavior as part of a larger project on understanding potential effects of severe weather events and potentially climate change on bird communities in this region;
- 5) locating army ant swarms for mist netting to determine species composition of the bird communities that forage with ants as part of a study of their ecological interactions.
- 6) fine-tuning our bird survey methodology for current projects and future ones we are developing

GENERAL SCHEDULE AND ACTIVITIES

We will discuss your interests and plan activities based on your preferences. This is an example of the general schedule. Activities such as mist netting, banding and sound recordings will be scheduled around weather conditions. Other activities can be conducted regardless of weather.

5am-6am: Breakfast

6am-12noon/12:30pm: Field Work

12noon/12:30pm: Lunch

1:30pm-4pm: Field Work

5pm-6pm: Dinner

We do schedule time off which is discussed during the first day.

1. Mist netting, bird banding & surveys

We conduct this activity in various habitats and locations within the reserve. However, because we work with equipment that need to stay dry, we work either near or under sheltered structures (buildings or picnic areas).

We sample the same area over a 2-3 day period, mist netting/banding in the morning and conducting surveys in the afternoon.

Mist netting/banding occur during the mornings. Nets are opened at 5:30am and checked for birds starting at 6am and continuing every half hour until 12noon/12:30pm when nets are closed for the day. We also photograph all birds that are captured for identification verification.

Surveys are conducted after lunch around a designated radius within the mist netting areas. During a survey, we observe birds as well as make video and sound recordings of birds.

2. Birding

We like to encourage walking along trails through the reserve's different habitats at a leisurely pace in order to get know the reserve, the bird species and their habitat preferences as well as collect general data for the bird species list. We have maps of the trails as well as prepared data sheets.

3. Sound & video recording

For those interested in sound or video recording, we will train you on the use of the equipment. We follow the same protocol of walking through different habitats of the reserve while identifying species being recorded.

4. Observations of bird behaviors and activities

We review the various behaviors that you may observe in the field. Routes can include a walk in a particular habitat or observations at specific plant species. We will discuss the information you will be collecting on prepared data sheets as well as how to mark and collect plant samples visited by birds.

5. Feedback on data sheets and survey methods

We rely on the experiences of and input from volunteers to update and revise the datasheets and our survey protocols for our citizen science projects. At the end of your stay we invite you to share your comments so that we can improve the data collecting process.

6. Training

One of the goals of our citizen science programs is to impart the knowledge and skills to continue monitoring where you live. We will discuss how you can help our efforts as well as provide you with

resources to continue data collection from home.

7. Your interests and abilities

There are a variety of bird and non-bird projects at the reserve. If you have particular interests that you would like to pursue or abilities you would like to share, please let us know. We can include other aspects of ongoing projects at the reserve into your volunteer experience!

PHYSICAL DEMANDS

Participants are expected to be in good physical condition to be able to walk within the reserve which is varying degrees of undulating terrain. Temperatures can reach highs of 91°F (33°C) with high humidity. Rain should be expected. If you have any medical conditions, please check with your physician before taking part in this program.

Mist netting/banding tend to require a minimum level of exertion. The specific activities include walking between mistnets and sitting while assisting in banding. Afternoon surveys associated with mist netting/banding range from mild to moderate exertion depending on the location of the mist nets and route of survey.

For all activities, the route will determine the level of exertion. Please note: Routes can always be chosen based on desired level of exertion and will be discussed beforehand.

Activities you can enjoy during down time include: swimming at waterfalls and swim holes, night hikes, visiting a bat cave, and exploring different parts of the reserve.

DETAILS

Cost

Cost for 12-day stay with transportation from Alajuela or San Jose, Costa Rica to/from the reserve is \$1,440/person.

Your stay at the reserve includes:

- Roundtrip transportation from Alajuela or San Jose to the reserve. We can arrange pickup from hotels in Alajuela or San Jose.
- All meals and snacks throughout the day
- Accommodations in the reserve

Accommodations

Housing is provided at the Bijagual Ecological Reserve. There are two buildings that house visitors to the field station in shared rooms: the two-story main "Casa" and the two-story streamside "casita". The "Casa", surrounded by a garden area planted with native species, sits above the Bijagual River and is situated adjacent to the rain forest. The "casita" is located beside a stream with the native species arboretum to one side and the forest to the other. The open-air design of the buildings allows for bird watching from virtually every part of the building. Bedrooms are enclosed. Bedding, towels and mosquito nets over every bed are provided. Enjoy the quiet and remote location with modern conveniences including electricity (110 volts with U.S. type outlets), potable water, indoor plumbing, and hot showers.

Meals

The cook prepares all meals and snacks during your stay.

Breakfast: Options include scrambled eggs, granola/cereal, yoghurt, tortillas, gallo pinto (a typical Costa Rican breakfast dish of rice and beans), fresh fruits, and beverages (fresh juices, milk, coffee, and tea).

Lunch and dinner: Options include a meat dish, vegetarian dish, salad, vegetable side dish, fresh fruits, rice, beans, tortillas and fresh juice followed by coffee and tea with cookies. Fixings to make your own sandwiches are also available at each meal.

Snacks: Fresh fruits and cookies with beverages (juices, milk, coffee, and tea) are available throughout the day.

Allergies & Dietary Preferences: Let us know in advance of your arrival if you have any allergies or dietary preferences. We can cater meals to suit these preferences. Please note: Though we can plan a meal around dietary preferences and allergies, we only have a single kitchen for food prep and cooking so that we are not able to provide strict gluten-free, nut-free, dairy-free, or kosher environments.

ADDITIONAL INFORMATION

Citizen Science Program

You will receive a packet containing: a daily schedule and information about the project activities, optional readings, list of suggested items to pack, bird checklists, and other information about what to expect at Bijagual.

Flights

There are two international airports in Costa Rica: Juan Santamaría Airport in San Jose and Daniel Oduber Quiros International Airport in Liberia. We advise that you to plan on flying into the **San Jose Airport (SJO)**. Should you choose to fly into the Liberia Airport, you will need to arrange your transportation to Alajuela/San Jose area. Note: The distance between the Liberia Airport and Alajuela/San Jose is approximately 220 Km or about 137 miles (approximately 4 hours driving time).

Please arrive into Costa Rica so that you are ready for pickup on the first day of the session as listed above. Schedule departing flights the **day after** the last day of session.

For any further information, please get in touch with Marie-Ann de la Fuente, who coordinates the Citizen Science program at [**madelafuente@bijagual.org**](mailto:madelafuente@bijagual.org)