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Centro de Investigaciones Científicas de las Huastecas “Aguazarca”, A. C.
Uniando Ciencia Y Servicio/Bringing Science and Service Together

CICHAZ, A.C., Visitor’s Guide (updated 5-III-2025)

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1 Introduction

Centro de Investigaciones Científicas de las Huastecas “Aguazarca” (CICHAZ; pronounced SEE-chaz) is a privately-owned federally registered research station located in Calnali, Hidalgo México. The station’s operations are funded through CICHAZ, A.C., a civil association (CLUNI 18-13-1-00961) in Mexico, and through its sister organization, CICHAZ USA, a 501(C)(3) non-profit based in the United States. CICHAZ, A.C. is also a SAT (Servicio de Administración Tributaria) authorized donee (folio 700-02-01-2020-02200) and is recognized as a research institution at the federal level (RENECyT # 1901319).

Founded in 2005 by co-Directors Gil Rosenthal and Rhonda Struminger, CICHAZ is dedicated to *Bringing Science and Service Together* through its scientific activities and outreach efforts. The field station, a member of the Organization of Biological Field Stations (OBFS; <http://www.obfs.org>) is set up to provide researchers with the resources they need to conduct field work in the Sierra y Huasteca region of Mexico. We hope you have a fun, safe, and productive visit.

We operate the field station out of a residence in a rural area of Mexico. Please work with safety in mind as there is only a minimal first-aid clinic in Calnali, a basic trauma center in Tlanchinol about 45 minutes away, and only marginally better care in Zacualtipán and Huejutla, each over an hour away. The nearest good hospitals are in Pachuca and Tampico, 3 ½ and 4 hours away, respectively. **Make sure you have appropriate medication and training for any conditions or allergies you have and let us know about them ahead of time.**

The facilities we operate do not conform to European, U.S. or any institutional safety standards. By working, visiting, or volunteering at CICHAZ, you assume any and all risks and responsibilities and release CICHAZ, A. C., the owners and users of CICHAZ, as and their employers and affiliated institutions, from any and all liability.

If you plan to visit CICHAZ, we suggest you contact us at admin@cichaz.org so we can learn about your plans, needs, and resolve any questions via email. We can also schedule a virtual meeting depending on the project.

At least three weeks before arriving in Calnali, visitors must carefully review this guide and register their trip using the CICHAZ visitor registration and agreement form found at: <https://forms.gle/ZL8JwnZK9DG8cNSF9>.

Once you have registered, we may need to set up a virtual, introductory meeting with the CICHAZ team to go over the logistics of your trip and answer any additional questions.



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2 CICHAZ personnel

When we receive your online registration form

(<https://forms.gle/ZL8JwnZK9DG8cNSF9>), we will email you contact information for CICHAZ personnel who will be helping you throughout your visit.

- Executive Coordinator: Ing. Gabriela Vázquez Adame
- Co-Directors: Dr. Gil Rosenthal and Dr. Rhonda Struminger
- Station Managers and neighbors: Don Clemente Hernandez and Doña Irma Perez
- Fishroom staff: Doña Johaira Hernández and Doña Magda Melo
- Chef: Doña Magda Melo

3 Communication

Calnali has regular, if frequently interrupted, connection with the outside world through cellular internet, and the internet at CICHAZ and elsewhere often works when cellular doesn't. You can also buy wi-fi time on private networks around Calnali and elsewhere with cards (fichas) that are sold in stores. Hard line phones are available as a last resort at Hotel Oviedo and elsewhere. Most mountain field sites and many small villages are out of cellular range. If you or your group plan to use a **satellite phone** make sure everyone in your group knows how to use it. CICHAZ does not condone or endorse any social media platform. We use free apps that are heavily used in rural Mexico to communicate with each other and with the general public.

3.1 Cellular plans and Mexican SIM options

- International visitors, check your international phone plan before departure.
- You can purchase a Mexican SIM card at any Telcel store (there is one at the airport as well as in Calnali).
 - **Program all emergency phone numbers in your phone on WhatsApp or however you plan to communicate with others during your stay.**

3.2 WhatsApp

WhatsApp is the primary form of communication with CICHAZ personnel before, during, and after your visit.

- We ask that all groups create a WhatsApp group for your team to use as you start planning your visit.
- Once you register your visit you will get the contact information for CICHAZ personnel and we request that you add Gaby Vázquez to your group so she can be in touch for logistics related to your trip.



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3.3 Other Social Media

When you do research at CICHAZ, we ask you to provide a summary of your research that we can use to explain your work to the public and share via social media. Photos and multimedia are also welcome! **Please email materials to admin@cichaz.org.**

Facebook is widely used for community information in Calnali and the region. There is a public CICHAZ Facebook page where we regularly post about activities at the station and relevant research or events: <https://www.facebook.com/Cichaz2005>

YouTube is a good way for CICHAZ to share videos and stay in touch with our supporters, researchers, and visitors. We have posted an array of resources on the CICHAZ channel: <https://www.youtube.com/channel/UCYPXyEqkPRnglngfyqalJ9w>. Please visit us, share your thoughts, and contribute any relevant videos you may create during your stay.

Instagram is linked to our Facebook account – look for [@cichaz.field.station](https://www.instagram.com/cichaz.field.station), follow us, and tag us when you have a good photo from the field!

The Virtual Field is a project that brings virtual educational experiences at field stations and marine laboratories from around the world to the public. CICHAZ is a proud participant. We encourage you to learn more about The Virtual Field programming here: <https://thevirtualfield.org/>.

4 Acknowledgments

Any type of publication (blog, journal article, conference paper, etc), poster, or media using data collected at CICHAZ must acknowledge CICHAZ.

If appropriate, please include CICHAZ in abstracts and, if appropriate, scientists should list CICHAZ as one of their institutional affiliations on their CV.

Contact admin@cichaz.org to be added as a CICHAZ researcher on our website.

Presentations and posters should also use the CICHAZ logo. To access a high-resolution logo, please email admin@cichaz.org.

5 Safety and Security

We stress that visitors use common sense when traveling to and from the field station, and around the area. Visitors are encouraged to register with their home-country embassy and obtain updated information from their national government on travel and security within Mexico.



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Calnali itself is very safe but be mindful of pickpockets during the Sunday market (early morning to early afternoon).

At CICHAZ, items left lying around at night on the porch and in common areas may disappear, especially small high value items like jewelry, cell phones, and cash. They often reappear, but use common sense. Items left outside on the sidewalk could be considered free for the neighbors so don't leave anything unattended in front of the building.

Visitors should use a buddy system and assign partners within their group so everyone has one other person keeping an eye out for them throughout their visit, especially if they are going hiking, walking, jogging, or socializing.

While we encourage interacting with the local community, we discourage visitors from going to parties that are not family oriented or hosted by people familiar to the CICHAZ community. If you choose to do so, you should use the same precautions you would use at home – watch your drinks being poured, do not overdrink, and make sure you are not alone. At all times you should consider yourself a representative of your intersectional identities (e.g., your home country, gender, region, religion, race, ethnicity).

Field Work Safety

Please review CICHAZ' recommendations below for success in the field. Also review **Appendix E: Emergencies**.

Field work recommendations:

- 1) Send a message through the WhatsApp group to notify personnel where you will be and when you are returning, so that in case of any issues we can activate emergency alarms and search parties.
- 2) Wear appropriate clothing. We recommend close-toed shoes, a hat, long sleeves. Water shoes like Chacos are ok for short distances along well marked trails.
- 3) Don't take risks you are uncomfortable taking. If you don't feel like doing something, don't do it.
- 4) Make sure you have a partner and pay attention to them throughout the day
- 5) Carry a first-aid kit and the CICHAZ first aid infographic
- 6) Bring water and drink small sips throughout the day to stay hydrated
- 7) Non-DEET, organic bug repellent/sunscreen, citronella or Avon SkinSoSoft –Do not spray yourself anywhere near the first floor of CICHAZ or outdoor tanks. Make sure your hands are 100% free of repellent and any other soaps or skin products when handling fish!
- 8) Carry a pocket knife and a small towel. Hand sanitizer is handy though lab ethanol does the job.
- 9) Make a list of the materials you need to do the expected work – and check it!



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- 10) Eat before you go – and bring snacks or a picnic. Tamales are optimal and come in fully biodegradable packaging.
- 11) To avoid snakes, make noise when you walk and carry a walking stick (especially in tall grass or other dense vegetation.).
- 12) If you go bushwhacking in remote areas, carry a machete for clearing vegetation. Ask Clemente or his daughter Mareli for training on how to use it

***After every field trip/day at the station, please meet with your team and discuss the day’s events. Did everything go smoothly? Were there any risky situations? If yes, what happened? Did the team get lucky or were they prepared? If it was luck, please review how to prepare and share with the CICHAZ staff. **We need to learn from your successes (and close calls) to keep all visitors safe, and keep us aware of situations before they become dangerous.**

Once at the station and assigned a room, please do not go into another visitor’s room without permission. All visitors are asked to keep their valuables (e.g., computers, phones, purses, backpacks) in their room when they are not being used – especially at night (the rooms can be locked). Items left in common areas have occasionally gone missing. Please securely lock entrances to the field station when leaving, including the upstairs door to the patio.

6 Hazardous Materials and Waste Management

Hazardous materials. If you are bringing in hazardous materials for your research project(s) **you are responsible for letting the staff at CICHAZ know and for assuring safe storage, handling, and disposal** of said materials. Your team must have protocols established and shared with the CICHAZ staff so there are no unknown risks involved in having these materials on the CICHAZ property.

All hazardous materials must be stored in clearly labeled containers. **NEVER, under any circumstances, use beverage containers for storing hazardous materials.**

Waste management. You are responsible for disposing of any hazardous materials you bring to CICHAZ. Please carry out what you carry **in – there is no place in or around Calnali to dispose of hazardous materials.** If you plan on generating larger volumes than you can carry out, please discuss well in advance with CICHAZ staff. There will be additional fees for hazardous waste disposal.



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7 Health & Healthcare

CICHAZ is located in the tropics. As in the subtropical U.S., the area is at risk for diseases like dengue, Zika virus, and Chagas disease. At about 1000m elevation, the town of Calnali itself is at relatively low risk from these vector-borne diseases, but you should avoid lowland areas (Achiqihuitla, Coacuilco, Huejutla etc.) near dusk and protect yourself from biting insects with non-DEET bug spray or lotion and long shirts and pants.

Be sure to review **Appendix A: Preparing and packing for your trip** and **Appendix E: Emergencies** where we list medical resources and things to look out for (like venomous snakes). A few things we want to reiterate:

- We strongly recommend completing a wilderness first aid course before visiting the station.
- Make sure you are up to date on all of your vaccines.
- Bring any medicines you need and communicate any allergies, dietary restrictions, or medical concerns you may have on the CICHAZ visitor registration form: <https://forms.gle/m1wrFbZgTAvibaAD6>
- At the station there is a first-aid kit that includes: aspirin, Pepto-Bismol, antacids, omeprazole, milk of magnesia, kaolin.
- There are numerous pharmacies in the center of town with standard first aid and nonprescription medications. “Farmacias Similares” only sell generic medicines.
- Chances are you will get sick with an intestinal bug at some point. Probiotic supplements (fermenti lattici) taken shortly before and at the beginning of your trip may be helpful. Regardless, if it’s your first trip, prepare to have a miserable day or two, but the good news is that once it’s over, you typically won’t get it as bad, if at all. (If lots of locals are eating someplace, it’s probably fine. But if it’s your first time you will get sick no matter what you do).
 - Traditional remedies in both Mexico and Italy include chamomile tea (for stomach inflammation), manrubio tea (for severe stomach pain), and a tablespoon of bicarbonate dissolved in water for gas. Doña Magda can make tea and soft food like rice or steamed vegetables for you upon request. A licuado de platano works wonders for some people.
- If you need emergency medicines like antibiotics, you need to go to a pharmacy with an on-site doctor who can prescribe it for you. See local pharmacy options in **Appendix E: Emergencies**.

You are responsible for following our rules and protocols – make sure you are familiar with them by studying this guide.



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8 Harassment and Discrimination Policy

CICHAZ is committed to maintaining an environment free from all forms of harassment and discrimination. Please bring any experiences to the attention of at least one member of the CICHAZ leadership team: Rhonda Struminger (rhonda@cichaz.org), Gil Rosenthal (gil@cichaz.org), or Gaby Vázquez (aspacgaby@yahoo.com.mx).

If you feel that the CICHAZ leadership team will not be able to help or address the situation, please contact the appropriate person at your institution, such as the ombudsperson, Trusted Advisor in the European Union, Title IX representative in the United States, or the Human Rights Commission of the State of Hidalgo (in Molango: <https://cdhhgo.org/home/molango-de-escamilla/>). If you are based internationally, please contact the appropriate person at your institution. Such concerns are taken very seriously by CICHAZ leadership.

All CICHAZ staff and management, as well as visitors, are required to work in a manner that prevents harassment or discrimination. If charges of harassment or discrimination are brought against an individual or group of individuals, there will be an investigation and the responsible parties may be asked to leave the property and could face additional (legal) consequences.

9 Getting There

9.1 By bus and taxi

From the main **Mexico City airport (MEX)**, the easiest thing to do is to take a first-class bus directly from either of the airport terminals to the **Pachuca** bus terminal and then take a taxi to **Calnali**. The new AIFA airport north of Mexico City (NLU) often has cheaper flights and is actually closer to Calnali, though with only five daily buses to Pachuca. Contact Ing. Gaby at least 72 hours in advance if you want to have a taxi meet you at the airport or the Pachuca bus station. Bus information can be found here: <https://estrellablanca.com.mx/>

From **Mexico City's Terminal Norte** bus station, there are several daily Estrella Blanca second-class (slow) buses to Calnali, about 5 hours. There are also frequent Estrella Blanca buses to Huejutla and Molango, both of which stop in Molango (about 4 hours) where you can take a taxi into Calnali (another 45 min). **Taxis stop running in the late evening.**

The bus passes right by CICHAZ before entering downtown Calnali; ask the bus driver to look out for the building with the big watery murals on the left-hand side after crossing the bridge before Calnali. There is also an official blue CICHAZ sign on the right.



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From **Tampico**, there are several first-class ADO buses from the downtown ADO terminal to Huejutla several times a day. From **Huejutla**, there are several combis (minibuses) to Calnali at different times. You can also take a taxi from Huejutla to Calnali.

From **Cd. Valles**, take a bus to **Tamazunchale** and then ask for directions to the **Huejutla** bus stop; there are buses that take about an hour and run every half hour. Follow directions from Huejutla as above.

9.2 **By car**

Car Permit and Insurance

- Liability insurance is mandatory in Mexico. Without insurance you will end up in jail if you cause or are involved in an accident and all expenses will be yours. A lawyer can minimally help if you do not have insurance.
- You can rent a car through global multinationals at the airport or in Mexico City, or through small local companies in Pachuca.
 - You can drive a vehicle in from the USA but you **MUST HAVE** a vehicle **permit** and **car insurance**. See <https://www.banjercito.com.mx/registroVehiculos/>, (<https://consulmex.sre.gob.mx/calgary/index.php/consular-services/148-traveling-by-car>), and sanborns.com (https://www.sanborns.com/?gclid=EAIaIQobChMIjpydo-GM4gIVWv7jBx22Iw9LEAAYASAAEgLUnfD_BwE.) for details. Note that trailers require their own separate permit and insurance

Pollution Control Measures in Mexico City and Hidalgo (Hoy No Circula)

- To control pollution in Mexico City, there is a calendar for when you cannot drive in Mexico City (<https://www.transporte.mx/hoy-no-circula-nuevo/>). You can get a temporary tourist pass to drive into Mexico City here: <http://www.paseturistico.cdmx.gob.mx/pasetur/>
- During the COVID-19 pandemic, Hidalgo also started a NO CIRCULA program but it is variable – check the web for updates (<https://coronavirus.hidalgo.gob.mx/>)

General tips when driving in Mexico – READ THIS CAREFULLY

- Drive with caution and follow all traffic laws! Your mandatory Mexican liability insurance will pay for any injuries you may cause to others or yourself as well as damage to the vehicles **but** you will still be fined or imprisoned if you are found to be at fault in an accident. As is the case anywhere you may travel you should respect the law and customs of the area – YOU ARE A VISITOR.

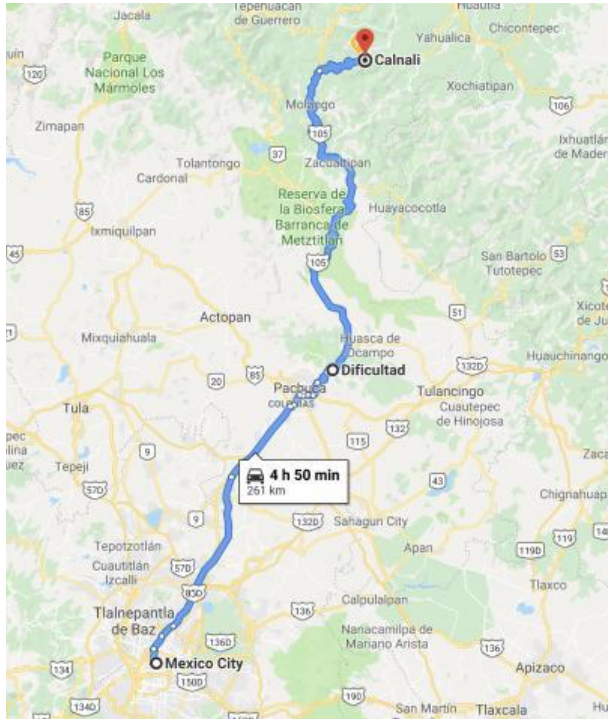


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- The law in Mexico is that the at-fault driver of an incident must take care of the costs of the accident through insurance or out of pocket, and the Mexican authorities must have a guarantee that you will cover the expenses or you will be going to jail. If you cause an injury accident after hours, you should prepare to spend some time in detention until formal proof of insurance arrives.
- On rural roads, a **left turn signal** usually means "pass me," unless the car is slowing down to turn left, and a **right turn signal** means "do not pass". When turning left, we recommend using your turn signal AND sticking your arm out the window to indicate a left turn.
- Slow down for topes (speed bumps) through towns and small settled areas. **Be on the lookout for washouts and rockslides**. Branches on the ground and red cloth on vegetation mean there's danger ahead, as do hazard lights on the vehicle in front of you.
- There is one gas station in Calnali on the road towards Atlapexco, the other nearby gas stations are in Ixtlahuaco, Molango, Tlanchinol, Atlapexco, and Huejutla.

Directions from Mexico City, Pachuca, and points south and southwest



To go from Mexico City to Pachuca, take the 85D/85.

In Pachuca, get on Hwy. 105 north past Zacualtipán (for a great treat, stop for pastes at Dificultad just outside of Pachuca – buy extras and bring them to CICHAZ and you’ll have an instant fan club). There can be dense fog around Zacualtipán and through the mountains.

After Molango and before Ixtlahuaco, turn east (it’s a right turn) towards Calnali on the Lolotla-Atlapexco/Calnali-Atlapexco road. After about 20-30 min, you’ll cross a bridge over the Río Calnali (Calnali-mid). CICHAZ will be on your left, look for the big watery mural.



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Directions from Huejutla, points north

Bypass Huejutla and follow signs towards Atlapexco. going straight through Tlalchihualica and Mecatlán (do not turn uphill towards Yahualica). You'll go over a bridge after Mecatlán, and the kilometer markers now count down to the Calnali turnoff. There are frequent rockslides on this road, so be careful. Pass the town of Calnali, on your right, and pass both turnoffs for Calnali/centro. CICHAZ is on your right about 100 m after the second turnoff. ***Directions from most of Veracruz state***

From Álamo, Veracruz, follow signs to Chicontepec. At Benito Juárez, keep going straight on towards Atlapexco and Huautla (do not turn towards Chicontepec). Keep going straight towards Atlapexco, and stay on the bypass road to the right of the town of Atlapexco. Immediately after passing the town, turn left towards Yahualica and follow directions as above.

10 Arrival Information

We expect visitors to respect the CICHAZ property and the items within. Visitors should assume that they need to bring their own supplies or make sure in advance that we have what is needed. Limited supplies *may* be available for use at CICHAZ but visiting researchers need to check prior to their arrival (e.g., laptops, cameras and memory cards, reagents, rechargeable batteries).

BEFORE you arrive, you need to email Gaby Vázquez (aspacgaby@yahoo.com.mx) all of your arrival/departure/field work needs (including animal care and transportation).

International visitors, BEFORE your arrival at CICHAZ, make sure that you know what permits or documents you need for exporting/importing equipment or samples (preserved or alive) in and out of Mexico. You and your institution are responsible for all import/export arrangements. Consult with your Mexican collaborators to make sure you are set. Again, do this BEFORE your arrival.

Communication is key for a successful visit. If you break something, use something, or get something dirty, please fix it, replace it, or clean it up. For things you cannot fix on your own (and even if you can), let CICHAZ staff know so we are aware and can help.

For your own safety, productive research endeavors, and successful community living, we ask that you follow the instructional signs posted throughout the station and the instructions within this visitor's guide.

A little advice to make sure your visit is a good one:

1. Be hospitable. Have coffee, drinks, fruit, snacks on hand if people drop by.
2. Enthusiastically accept hospitality when it is proffered.
2. Be patient. Calnali tiene su tiempo.
3. Expect company. When you invite one person, you're also inviting their family and friends.



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4. Say "buen provecho" when you're entering or leaving a place where people are eating.
5. Turn off lights and fans when you leave a room.
6. Communicate your plans to staff as far in advance as possible.
7. Address people older than you with "usted".
8. Tune in to local and Indigenous culture.
9. Use your skills, knowledge, and outlook to do something positive.
10. Learn from the skills, knowledge, and outlook of the people you meet.

10.1 The neighborhood community and stores

Clemente Hernández (Don Clemente) and Irma Pérez (Doña Irma)

Don Clemente and Doña Irma are the primary caretakers of CICHAZ, A.C. They live across the street and to the right in the house with a mural featuring corn and the god Tlaloc. Their son Biol. Osvaldo is a CICHAZ biologist and visits the station regularly. Ask them for help with anything you need **but please be respectful and understand they do have lives so they can't always do something 'right now'**.



Stores (Tiendas)

- The store next door, Abarrotes San Antonio, is run by Karla and Rey Zapata. Theirs and similar stores in the neighborhood sell water, milk, and cold beverages of all types as well as some snacks and groceries.
- The store across the street, Nelly, Hernandez Zapata is another good resource for basic groceries.
- Ernestina is the woman who lives on the other side of CICHAZ; she and her daughter, Lupita, sell dough and, if requested in advance, they can make lunch to take to the field. They can prepare bocoles, sandwiches, enchiladas, sausages for hot dogs and things like that. The earliest they deliver is at 7:00 AM.

Mural Alley

Walk downhill down the street (towards Calnali Centro) to see the murals painted in 2018 by the Siqueiros Sinfronteras Foundation. (See more about this project here: <https://www.cichaz.org/murales-murals/>).

Other Residences and Resources

Continuing along the street towards downtown Calnali, are the following residences and resources:

- **CICHAZ's Executive Coordinator Ing. Gaby Vázquez** lives down the alley to the right with a mural of the coffee harvest.



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- On the left is the **mechanic Don Gil**.
- On the right and then the left (across from the last mural) are **tacos** (Bayos).
- Further down at the intersection into town are two **tire repair shops**. **At the one that is a little wooden house, ask for Ever if you have a flat!**
- If you turn right, about 500 m further towards Atlapexco, the only **gas station** in Calnali is on the left.
- If you turn left towards Calnali Centro, you will pass a terrific hardware store, **El Tigre** (run by Miriam and Chucho).

10.2 The House: General Rules, FYIs, and Recommendations

1. If you're keeping aquatic creatures, refer to the aquatics protocol on the CICHAZ website for details: <http://www.cichaz.org/investigación-research/plantel-acuático-aquatics-protocols/>. **Consult CICHAZ leadership if you want to keep terrestrial creatures.**
 - a. Please note that the dish towels stored under the microwave are to **ONLY BE USED IN THE KITCHEN**.
 - b. Dirty and wet rags should be put on the patio railing.
 - c. Rags used for research/any fish-related work should hang them to dry on the patio or balcony railings.
2. Leave all common spaces, lab, and fish room areas as you found them on arrival.
3. Follow all posted rules.
4. CICHAZ has two wall-mounted first aid kits – one downstairs next to the dish cabinet and one upstairs next to the bathroom.
5. Sunscreen and fish friendly bug spray are available on the table next to the dish cabinet.
 - a. Biting gnats and mosquitoes abound, apply insect repellent liberally. **Do not get insect repellent anywhere near fish, fish tanks, or fish supplies. If you are at CICHAZ, go to the upper floor to apply insect repellent.** Do not use products with **DEET**. We recommend Natrapel or other picaridin repellent. Avon's SkinSoSoft is also good. These repellents are still **TOXIC TO FISH** so **WASH YOUR HANDS** before handling any fish.
6. There are a lot of community spaces and CICHAZ expects a communal attitude.
 - a. Respect public spaces by keeping them clean
 - b. Keep your belongings in your room or in a bathroom
 - c. Make sure anything that you do not want to share is labeled
 - d. Do not leave things on the patio! It quickly gets cluttered and items are lost.



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7. If you are planning multiple trips to CICHAZ, you can request a box. Leave your items in the box, make sure it is labeled with your name, and we can store it in the upstairs storage room. If you have wet shoes at the time of your departure, make sure you have them labeled with your name on them and tell Don Clemente, Doña Irma, or Ing. Gaby so they can put them in storage once they are dry.
8. Items that go unclaimed after one month will be put in the donations box in the second-floor storage room.
9. Check shoes and drawers for tarantulas and scorpions.
10. Another COMMON pest found throughout the Americas are cockroaches. Some visitors are more disturbed than others. Depending on where you fall in the tolerance spectrum, prepare yourself and learn [La Cucaracha \(lyrics here\)](https://genius.com/Autor-anonimo-la-cucaracha-una-version-de-la-revolucion-mexicana-annotated).
<https://genius.com/Autor-anonimo-la-cucaracha-una-version-de-la-revolucion-mexicana-annotated>
11. Wash muddy and heavily soiled shoes before entering the house. There is a rectangular basin below the back stairs for this purpose.
12. Before your departure, remove from the refrigerator and shelves any food you purchased and cannot take with you, and leave it on the kitchen table so CICHAZ staff knows that anyone can consume it.

10.3 The Laboratories and Resources

General Rules and Recommendations

- Think about the equipment you will need before your arrival. Check with CICHAZ about your needs. For example, we recommend bringing your own memory cards for cameras if you need them. These are always in short supply. As well, batteries. We have rechargeable batteries and want these to be used to minimize battery waste. Plan on recharging your batteries with the available battery chargers.
- Label everything you use. For all research, dates are labeled day-month-year with the month as a Roman numeral. 28 mayo 2025 / May 28, 2025 for example should be written 28-V-2025.
- **As stated in section 6 above**, if you are bringing in **hazardous materials** for your research project(s) you are responsible for letting the staff at CICHAZ know and for assuring **safe storage, handling, and disposal** of said materials.
 - i. Your team must have protocols established and shared with the CICHAZ staff so there are no unknown risks involved in having these materials on the CICHAZ property.
 - ii. All hazardous materials must be stored in clearly labeled containers. **NEVER, under any circumstances, use beverage containers for storing hazardous materials.**



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- iii. You are responsible for disposing of any hazardous waste, including e-waste and spent batteries, that you generate while at CICHAZ. Please carry out what you carry in – there is not place in Calnali to dispose of hazardous materials. If you plan on generating larger volumes than you can carry out, please discuss well in advance with CICHAZ staff. There will be additional fees for hazardous waste disposal.
- All equipment used in CICHAZ must be returned after use, where it belongs, clean and in the same or better condition in which they were found.
- Ask the CICHAZ team and visiting scientists before using things. Even if you are a regular CICHAZ researcher, do not assume you know the current experiment settings or aquaria assignments.

10.4 The Backyard

- Be mindful that live animal habitats are all around you. The half of the backyard closest to the house is full of freshwater fish. Please be mindful of the tanks when passing through there, especially if you are carrying cleaning supplies or chemicals.
- There are nests of Africanized honeybees around the backyard. Don't bother them and they won't cause problems.
- There are often paper wasp nests on the roof of the house. They are generally harmless but can and sometimes do sting. Just be aware of them and keep your distance during the hottest parts of the day. The rounder nests with small wasps are honey-wasp nests...they are stingless and produce honey. Leave them alone.
- Introduced fire ants are a pest here just like in the southern USA. A few bites are merely annoying, though painful, unless you are allergic.
- There is an abrupt drop-off to the river, exercise caution with young children or impaired adults. The steps down to the river can often be covered with leaves that can be slippery so be cautious with them as well.
- Help yourself to fruit on the trees. We have fruit trees including sweet and sour oranges, tangerines, lemons, limes, mangos, “caca de rata” chiles, jackfruit, papaya, peaches, bananas, and *pomarosa* among a few others.
- **Do not sample in the stretch of river behind the house**, as this is our long-term study population. Talk to Dr. Rosenthal if you want to work there. You are welcome to swim as long as you are free of sunscreen, hair products, bug spray and other chemicals. Take a shower right after.

10.5 Water

- **Please conserve water** as much as possible. Supply can be intermittent. **FISH ARE THE PRIORITY** over humans so be prepared to go without running water for up to 72 hours. You can use a fishroom bucket filled with water from a stock



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tank (as directed by CICHAZ staff) to flush the toilet during extended water outages.

- The black plastic reservoir (*tinaco*) on top of the roof is filled intermittently with chlorinated water for bath and kitchen use. This water is chlorinated and fine for brushing teeth and showering, **but don't drink it**.
- 20 L water jugs are filled by Don Nacho. Ask Magda for more if we are running low. If the situation is urgent, you can go next door to Karla's tienda. **Bring a bottle in order to buy a new one.**

10.6 Propane Gas

- There are propane tanks for kitchen/bathrooms and for the generator which are regularly filled by CICHAZ staff. If there is no hot water or gas going to the stove/oven please let them know immediately or, with an experienced CICHAZ visitor, you can go up to the roof and open the valve to the propane tank.
- Hot water is largely supplied by a solar water heater, so try to shower in the afternoons or evenings.
- In cold weather, if there is gas in the stove but there is no hot water for the shower, contact Don Clemente to replace the batteries of the on-demand water heater outside the bathroom.

10.7 Electricity

- **Conserve energy as much as possible** – turn off fans, heaters, and/or lights when you leave a room.
- **CICHAZ runs on 110V current.** The plugs are the same as in the rest of North America. Bring adapters if needed. We have extra 110V phone chargers. A simple adapter is fine for electronics designed for travel, but research equipment like microscope lamps will likely need a voltage converter if it runs.
- If power goes out check the **breakers** (make sure the switches are up) located just inside the driveway door. While you're there, reset the **timer** so that the big silver arrow matches the current time.
- Talk to Gaby if you are planning on running procedures like PCR that cannot tolerate a power interruption. We will set up the No-Break and the backup generator to provide continuous power.

10.8 General Cleaning



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- The kitchen floor should be swept regularly to avoid bugs (there should be a broom and dust pan on the patio or in the kitchen).
- Doña Irma will come to clean the house twice a week, but guests are expected to clean up after themselves.
- The garbage truck drives by on Mondays and Thursdays in the early morning (6:00 – 7:00 a.m.). They make their presence known by ringing a bell and Clemente is usually on the lookout for them. If for some reason Clemente has not already done this, take the trash from the side of the house to the curb in front of the field station; we like to tip the collectors 20 pesos if we see them.

11 Kitchen and Food basics

Do not use the kitchen or anything in it for biological research or fish care. The exception is human-safe fish food in the kitchen freezer. There are sinks in the labs and fish rooms for research use – and the patio utility sink is also available. To be clear, **all plates, cutlery, and other kitchen items are to be used IN THE KITCHEN ONLY.** None are to be used for research.

*****Please clean up any food once you are done eating or preparing it. We are in the tropics and roaches love a dirty kitchen. ******

- Sra. Magda will prepare one meal a day for large groups (and there will be leftovers!). Please coordinate with Ing. Gaby well in advance of your visit.
- For breakfast we provide eggs, milk, margarine, fruit, vegetables, chorizo, ham, cereal, yogurt, nuts, etc. When you cook, we ask you to clean up all your dishes when you are done.
- If you want to take a lunch into the field, our next door neighbors Sra. Tina and her daughter Lupita can usually prepare a picnic lunch if notified at least 24 hours in advance. Expenses can be added to your institutional CICHAZ bill if needed.
- In the CICHAZ freezer we keep bags of peanuts and nuts available for field trips. If there are no bags, please ask. These snacks are considered part of our first aid kit for field work. If you are allergic to nuts, let us know.
- CICHAZ produces lots of citrus, papayas, beans, jackfruit, bananas, and herbs – try the caca de rata (rat poop) chiles – they are tiny and grow around the in-ground stock tanks. Help yourself to firewood, fruits, and vegetables. Be sure to try the pomarosa/rose apple (rose-flavored fruits in season in May/June) near the path to the river.
- You can buy coffee beans and ground coffee through Ing. Gaby’s ASPAC coffee non-profit.
- There is a coffee grinder, a moka, and several French presses.



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Refrigerator

- Put anything not for human consumption in the “dirty fridge” located inside the door of the phenological lab.
- Label anything you do not want to share (but we encourage sharing!). Be sensitive about vegan and other special diets where people have to bring food in from outside.

Dishes

- Even if Magda is around to do dishes, please clear and scrape your plates into the compost and stack near the sink.
- Please minimize the soap and water used to clean dishes.
- Dishes should be done immediately after each meal to minimize ants, roaches, etc.
- Please do not use any metal utensils when cooking with the non-stick pots/pans.

Counters & Floors

- Please sweep after every meal (the broom and dustpan are on the patio or in the kitchen).
- Clean the table with sponge or cloth.
- Do not use towels from upstairs to dry the floor – use a mop!

Dish Towels

These are used to dry dishes **only** and are located under the microwave. Please add them to the pile of sheets and towels to be washed when needed.

These should never leave the kitchen except to be washed.

11.1 Compost

- We have a compost bucket in the kitchen – please put kitchen waste in there including meat and dairy, which is fed to local livestock
- When the compost bucket is full, please empty it in the designated area near the concrete register beyond the driveway. We have a system and an experienced CICHAZ visitor can show you where and how to empty it.

11.2 Reuse and Recycling

- Reuse containers as much as possible. Put the paper, plastic, and aluminum trash in the appropriate container in the kitchen and garbage areas.
- If you use any 500ml or smaller plastic bottles of soda or mineral water, we can reuse them – no need to recycle. When it is empty, rinse it out and put it in the



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mesh bag on the patio next to the oven. These smaller bottles are good for storing dead fish.

12 Bedrooms and Sleeping Options

There are five bedrooms at CICHAZ; some guests prefer camping in the backyard and all visitors are welcome to do so. Gaby will let each visitor/group know which rooms/beds are available for use and specific requests will be accommodated whenever possible.

First Floor – Leaders’ Suite

Reserved for trip leaders, special guests, and mobility-impaired visitors

Second Floor – Four bedrooms

- Nopal Room (*Nohpalli*): 1 bunk bed, 1 double (sleeps 3 to 4 people)
- Pitahaya Room (*Tzaponochtli*): 1 bunk bed, 2 single beds (sleeps 3 to 4 people)
- Guayaba Room (*Xalxocotl*): 1 bunk bed, 1 double (sleeps 3 to 4 people)
- Aguacate Room (*Ahuacatl*): 1 bunk bed, 1 double (sleeps 3 to 4 people)

Camping

An outdoor bathroom, shower, and storage units are available on the ground floor of the directors’ residence for those who choose to camp in the backyard. Ask Irma for a key to access the bathroom during your stay; if you lose the key you will be charged 400 pesos.

13 Bathrooms

There are three bathrooms at CICHAZ; one downstairs and two upstairs. If there is no toilet paper in them, please go to the upstairs storage room and grab two rolls (one for now and one for later) and put a roll on the dispenser.

If you want to keep your bathroom products in the bathroom, please label them and keep them together in a caddy so there is counter space for others.

Toilets

- Try to urinate in the garden rather than in toilets. Anything that goes down the drains ends up in the river downstream of town, untreated. Think of your downstream neighbors before you flush. When possible, please urinate discreetly in the backyard at least 2 m away from any in-ground fish habitats.
- Put toilet paper and other sanitaries in trash cans rather than down the toilet. The plumbing can handle a tiny bit of paper (one wipe).
- If the water is off, fill a bucket with water from the fish tanks outside and pour the water into the toilet when you are done (ask the CICHAZ staff where exactly you can get the water from; they will support you with this).
- Bidets are unknown in the Americas.



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Showers

- Try to keep them brief. Fish get first priority if we run out of water.

Sinks

- Tap water is chlorinated and fine for brushing teeth, but don't drink it.

14 Sheets and Towels

- Towels, sheets and blankets can be found on the second-floor landing (in the corner storage room).
- These towels are **only** for personal use and we ask that you use **only one** during your stay; wash it as needed.
- When you leave, pile sheets and towels in the hallway in the clothes hamper.

15 Laundry

- The washing machine is located on the roof. If you are unfamiliar with how to run the washing machine, please ask the staff or someone who has used it before. Hang clean clothes on the roof or on the second-floor terrace to dry. If it is raining, hang clothes on the back patio and/or the staircase railing.
- Next to the washer is a sink where you can hand wash clothes if you like.

16 Internet and Cell Service

16.1 Internet

- CICHAZ has modest internet access. There are separate networks on the upper and lower floors. The wireless password is on the refrigerator door. Please avoid transferring large files and do not share the password with the neighbors.
- Avoid streaming video. Please go look at the stars, read a book from our library, watch a DVD from our collection, or talk to somebody. Essential communication and science take priority.
- **Please make sure wi-fi is turned off for all but one of your devices at a time.** You may have to take turns with other people when it comes to having your wi-fi on. There are several internet cafés in town and StarBit sells wireless minutes that you can access in most of the urbanized part of Calnali.

16.2 Phone

- Cell service and cellular internet can be spotty; at the field station, often you need to be on the roof to get the best reception.
- We don't have a landline; all communication is by cell phone. If coming from the Americas, your cell phone provider may have a cheap international data plan for



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Mexico. Otherwise, plan on buying a Mexican SIM (for example through Telcel at the airport or in downtown Calnali. Plan to use WhatsApp for most communication.

- If calling Mexico from outside Mexico, country code is +52 and then the number
- To call from Mexico to a foreign country, dial 00 and then the country code and number.

17 Meeting and Work Spaces

On the second floor of CICHAZ there is a desk available for use. There is also a dining table downstairs that can be used for meetings, as well as the back patio and the palapa in the backyard. A projector and screen as well as extra chairs can be made available upon request. See Appendix C for details on our laboratories, fish rooms, and outdoor tanks.

18 Public Engagement

When you do research at CICHAZ, we ask that you provide us with a short explanation that we can share with the public about your work as well as photos or multimedia – we will cite you on our web site and on other social media platforms.

We also ask that **you to plan to engage with the local community in some way – a central part of the CICHAZ mission is avoiding parachute science. Below are some of our regular events and resources. We encourage you to come with some of your own ideas for community engagement and are happy to work with you to come up with activities of special interest.**

18.1 CICHAZ-ASPAC Jornada and/or CICHAZ Open House

Annually we host a CICHAZ open house and often on the same weekend, we collaborate with ASPAC to host a Jornada for the community. The open house gives our neighbors the chance to explore the CICHAZ property and see the work we do. The Jornada is traditionally a guided hike featuring information stations where CICHAZ researchers (regulars and visitors) explain their work and give visitors a chance to do some hands-on learning. Whether it is seeing how birds or tagged, looking for beetles, or taking water samples, we try to find low tech ways to make learning fun and conservation a priority.

18.2 Information tables and school visits

We sometimes set up information tables on Sundays (during the market) with hands-on activities for passersby. We also sometimes organize school visits. If you are interested in participating, talk to Gaby or Rodrigo.



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18.3 Rodando Saberes (RoSa)

RoSa is our mobile learning laboratory that brings fun activities and scientific equipment to schools, communities, and/or field sites. The curricula we offer with RoSa are always changing and we encourage our visitors to help us develop learning opportunities that promote sustainability, conservation, and a love for science. Citizen science projects are especially welcome.



19 Entertainment/Fun Activities

While we expect everyone to be working hard we know you need some down time and some fun! Please take advantage of the facilities but we ask that **during the week any loud activities are wrapped up NO LATER than 10:00 PM and on weekends, 1:00 AM.** Please be respectful of your neighbors and colleagues who need a good night's sleep.

Books

Over the years CICHAZ has gained a collection of books in English, Spanish, Italian and a few other languages. These can be found in the hallway of the second floor of the main CICHAZ building. You are encouraged to contribute your own books to the library. If you are still reading a book and want to take it with you, email Gil (gil@cichaz.org).

TV/ DVD Player

To enjoy our movie collection, use the region-free DVD player in the living room. Return DVDs to their proper cases when you are done and file them alphabetically (if you find them in disarray, please feel free to organize them!).

20 Groceries and Eating Out

20.1 Abarrotes/Miscelanea/Mini-Super (convenience stores) in Aguazarca

- You can get general staples here (milk, basic fruits and veggies, eggs, beer, flour, water, snacks, packaged tortillas, etc).
- 20-L water bottles can be exchanged for ~20 Mexican pesos. Bring your empty in exchange for a full one.
- Santa Clara and Alpura milk are all milk, most other brands are cut with vegetable products.
- Most things in glass bottles, like beer and soft drinks, carry a deposit. You are financially responsible for any bottles you break or lose. Check next to the refrigerator at CICHAZ for bottles you can exchange for fresh ones at a neighborhood vendor.



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Abarrotes El Coyote is the main supermarket in town. You can get all the basics here, including alcoholic beverages - except pharmaceuticals, fresh meat, and veggies. They *intermittently* accept major credit cards so plan to have cash on hand.

Market

- Fruit and vegetable stands are set up most days of the week. A butcher shop by the *presidencia* (town hall) has fresh meat. The chicken stands sell both fresh chicken and tasty rotisserie chicken.
- If you want fresh corn tortillas, Doña Magda can make them for you or you can go to tortillerías in town. Many families in the neighborhood have their own cornfield (*milpa*) and makethem by hand at home.
- The fresh *pan dulce*, available in town and occasionally next door from Lupita, is very good.

Market day is **Sunday**. Show up by 11 am to ensure you’ll find everything you need. To get to the rio Xontla, San Pedro, and Acuapa on a Sunday, you’ll need to go an alternate route. See glossary for you to know some specific items available in the market. The most unusual items are sold by elderly indigenous ladies sitting on the ground, mostly in the central plaza. Be sure and try *zacahuil*, the meter- long tamale, as well as chickpea *empanadas* and *guisados* by **Doña Gelasia**, near the center of the market.

You can ask Doña Magda to prepare something from what you find. She also makes tortillas and sometimes surprises us with bocoles (corn dough with beans or cilantro or just salt) and fresh enchiladas.

20.2 Eating out

- Some of the best food is sold at taquerías and other small family stands – see glossary for specifics.
- We recommend taking a few nights during your visit to eat out:
 - **Taquería Bayos** is right down the street
 - **Hotel Oviedo/Restaurant La Jarochita** has substantial and delicious meals for about \$120MXN. It’s best to give them a heads-up in the morning or earlier if you plan on a meal there.
 - **Restaurante Calnali y La Florecita** offer “plato huasteco” that consist of *cecina* (meat that has been salted and dried by means of air, sun, or smoke) with *enchiladas*.
 - **Cabaña Betitos** offers burritos, wings and other charcoal-grilled delicacies.
 - The area around the zocalo – has a few options as well: Rotisserie chicken, quesadillas and tacos (**Doña Lulú** – in front of the Presidency), tortas, etc.
- If lots of locals are eating someplace, it’s likely to be tasty and pretty safe. But if it’s your first time visiting Mexico you will get sick no matter what you do.



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21 Vehicle Use

To use one of the CICHAZ vehicles, you must have a valid driver’s license and we ask you to avoid driving through deep streams as this can damage the undercarriage sensor. After each use, please clean out any trash.

There is a 500 peso per day fee as well as a 500 peso cleaning fee per visit. If the vehicle needs to be professionally cleaned, we will charge 1500 pesos.

We ask drivers and their passengers to pay for the gas they use and to leave the tank full. There is a PEMEX station in Calnali down the street (Juaréz – Barrio Nuevo on the Lolotla-Atlapexco road). If the tank is not left full before another group uses the vehicle, there will be a 2000 MXP fine.

There is a Vehicle Usage Form kept in the field vehicle, please fill it out each time you use the vehicle so we can track usage. Short trips into town still use gas so make sure the gas gauge never goes below $\frac{3}{4}$ of a tank.

Before using the vehicle, please go over the vehicle with Clemente to identify any issues – take photos to document the condition of the car before you begin driving to avoid responsibility.

In case of an accident or damage to CICHAZ vehicles, you are responsible for covering the cost. If a CICHAZ vehicle is damaged while you are using it, repairs are your responsibility, whether the damage is your fault or not. Please do your best to handle it yourself while still at CICHAZ; if we have to do it, we will charge you the cost of repair, plus CICHAZ personnel time.

For major incidents, CICHAZ has insurance and there is a \$17,000 MXN deductible. The driver/group responsible for the accident must pay the non-refundable deductible as well as any additional repair or liability costs. If CICHAZ gets reimbursed for any costs above the deductible, the responsible driver/group will get reimbursed accordingly.

22 Fees

CICHAZ relies on user fees for financial sustainability. The fees paid by those who use CICHAZ facilities will cover operational and maintenance costs of physical infrastructure, equipment and basic supplies and services that are available to visiting researchers and students. When planning to visit CICHAZ or preparing grant applications for work at CICHAZ, **budget 1600 pesos/person/day for housing and bench fees.** If you want to include meals, plan on **2000/person/day**. Financial assistance is available for



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researchers without dedicated funds. Please contact us with questions or for more information about financial assistance if it is needed.



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Appendix A. Preparing and Packing

Visas

Please review if you need a visa from your home country to visit Mexico for the duration of your planned stay at CICHAZ. Citizens of USA, Canada, Italy, and other Schengen countries do not need visas, nor do holders of residence visas in those countries.

Vaccines

Please make sure that you are up-to-date on all vaccinations, including tetanus, COVID-19 and influenza, so you are healthy and ready for field work!

Travel and Health Insurance

All international visitors **MUST** have travel insurance to cover any unexpected medical expenses, trip interruption, medical emergency assistance and treatment services and more. You may be able to get this through your home institution. If you have private health insurance in your home country, check with your provider whether it will cover you for expenses incurred in Mexico.

We request but do not require proof of travel insurance before you stay at CICHAZ, A.C. **BUT we assume no liability for any costs you incur associated with your trip, your activities, or your stay at CICHAZ, A.C. You are ultimately responsible for any expenses or emergency costs.**

Packing – General Tips

Money and IDs

- Cash (Mexican pesos). Market stands, food stalls, and small independent stores only take cash. It's easy to **change cash at the airport** or on the U.S. side of the border, but very difficult to do within interior Mexico. If changing at airport, do so after you leave baggage claim at any of the kiosks in the public arrival areas. Keep small change around for public restrooms (2-5 pesos).
- ATM card (make sure you know your pin!)
 - Calnali has two ATMs that accept most international ATM cards but they do run out of cash on market days (Sundays) and often are not replenished for a few days.
- Credit card
 - Contact credit card company before travel to authorize international use
 - Credit cards from the USA can be problematic at gas stations, be sure to have cash as a backup.
 - In Calnali, only one store currently takes credit cards – the supermarket, Abarrotes El Coyote



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- Documents (passport, driver’s license, and any required Mexican immigration documents)
- Digital image of your passport photo, in a folder you can access without your device.

Technology

Mexico uses 110V North American electrical sockets (two flat prongs or two flat prongs and one round prong). Don’t forget adapters or converters if you need them!



- If you are charging USB devices, you can buy a 110V USB wall charger on arrival at the airport, or at convenience stores and supermarkets in Calnali and all over. Laptops and other small electronics designed for travel usually have the capacity to convert a range of input voltages, so a simple, inexpensive plug adapter is sufficient.
- Lamps and specialized lab equipment are generally designed for one voltage or another. Talk to CICHAZ personnel before buying an (expensive) voltage converter for this purpose.
- Bring your personal technology equipment that you need for your work. This includes your phone, computer, backup and storage media, charging cables, wall adapters or converters. We have rechargeable batteries that you can use if you tell us your needs in advance.
- It is good to have a portable charger for extra power.
- International visitors, check your international phone plan **before** departure. You can buy a Mexican SIM card at any Telcel store.
 - There are several Telcel stores at the airport and we recommend getting the SIM card there. If you don’t have time at the airport, you can buy them in Calnali but availability is often limited.
- **Program all emergency phone numbers in your phone on WhatsApp or however you plan to communicate with others during your stay. If you ever need to call 911 (the emergency number in Mexico), you must use your regular phone line (not WhatsApp).**



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Basic Checklist

All of these items easily available at local supermarkets/pharmacies except *

- Toothbrush/toothpaste.
- Shampoo/conditioner.
- Menstrual cup*/Tampons / Pads /
- Soap.
- Deodorant.
- Extra underwear and socks (*larger sizes)
- Bug spray (**REMINDER:** Do not bring any **DEET** products to the field station. We recommend Natrapel* or other picaridin* repellent. Avon Skin So Soft* also works. Not sold locally so please bring!!! These repellents are still **TOXIC TO FISH** so **WASH YOUR HANDS** before handling any fish).
- Hand sanitizer.
- Zinc-based sunscreen* (Never use conventional sunscreen if you are going in the water, and use zinc-based sunscreen only if you must).
- Headlamp.*
- Change (5 and 10 peso coins) for toilets.
- Toilet paper or tissues for emergencies. Most pay-for-use bathrooms supply toilet paper, many free bathrooms don't.
- While the field station supplies towels, we ask each guest to use just one. If you need more than one you may want to bring a fast-drying microfiber towel* with you.

No need to bring sheets - the field station has a generous supply.

Clothes

Visitors should plan to wear clothes multiple times before washing. CICHAZ has a washing machine but it is the last priority if there are water shortages. All clothes are line dried; once the summer rains start this often means drying clothes inside the house. During the dry season especially, anticipate water outages and shortages. Water for the fish takes priority over the washing of bodies or clothes.

Some visitors bring the same personal supplies and some of us tend to leave our things in public spaces – **if you want something to stay in your possession, label it. Items without a label often are made available for public use.** If you want to leave items for a return visit, ask for a box and make sure your name is on it.

Temperatures can range between near-freezing at elevation in winter to 45°C in the lowlands in summer. Plan accordingly. Basic clothes are available locally for smaller sizes. We recommend investing in a high-quality rain jacket, water shoes, and hiking shoes depending on your planned activities.



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- Water shoes (Chacos, Sagueros, Keens, etc. work well for water activities and short hikes along cleared trails).
- Walking/ hiking shoes (water resistant recommended for bad weather).
- Socks.
- Shorts.
- Undergarments.
- Long hiking pants (convertible pants recommended).
- Bathing suit.
- T-shirts.
- Light short and long-sleeve shirts (long sleeve shirts recommended in evening when the gnats start biting or for walking on very hot days to avoid skin burns).
- Long pants/Jeans (quick-dry recommended).
- Light rain jacket.
- A sweatshirt, sweater, and/or a warm-weather quick drying jacket (it can get cool in the evenings, especially in winter and at high elevations).
- For longer visits you may want to bring one nice outfit (for visits to local schools, meeting with officials, or making public presentations). Local *huipiles* are always appreciated for both men and women, paired with dress slacks or skirts. These are available at the market or by custom order.

Field Gear

- Hat! Broad-brimmed recommended but minimally a baseball cap. Beautifully made straw hats are available locally.
- Sunglasses.
- Small day bag/backpack.
- Water bottle. If you come by air, you will have at least two plastic water bottles given to you by the airline. Please save for reuse at CICHAZ.
- Ziploc bags or small dry bags.
- Large plastic bags to store wet/dirty clothes and shoes.
Talcum powder/baby powder. Recommended to avoid rashes.
- Zinc-based sunscreen.
- Non-DEET insect repellent.
- Pocket knife or tool (remember to put in checked luggage if you fly)
- If there are any clothes that are still in good shape that you no longer need at the end of your stay, please consider donating them. There is a donation box in the storage closet on the second floor. Anything left at the station that goes unclaimed after a month will be added to the donations box.
- Please consider leaving behind your leftover DEET-free mosquito repellent and zinc-based sunscreen, as we cannot buy these locally. Write the date opened with a Sharpie somewhere on the bottle and leave it by the water station in the kitchen.



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- You are encouraged to bring other items for donation such as old phones, usable electronics, or clothes you don't plan to use while at the station. At the same time, your junk and e-waste are your responsibility to remove from the station. Check ahead if you are bringing trash or treasure.



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Appendix B. Departure Checklist

The list below is a general review of what needs to be done before you go. Please complete our online checklist **before** your departure to be sure you have left things ready for your next visit or for the next visitor: <https://forms.gle/71uwCzkU3JR6cdq4A>

Kitchen	
	Make sure Magda is aware of any perishables you purchased, or be sure to leave them on the kitchen table when you leave.
	If you want to keep your own private food stash for next time, it must be in an entirely sealed, entirely vermin-proof glass or metal container in your personal box. Improperly sealed food will be immediately given away or thrown out after you leave.
Bathrooms	
	Gather sheets and towels for the laundry and leave them in the hallway in the clothes hampers – DO NOT PUT WET TOWELS IN THE CLOTHES HAMPER. If towels are wet leave them hanging on the railing in the hallway and let CICHAZ personnel know.
Bedrooms	
	Strip beds.
	Lock windows.
Office	
	Lock windows.
	Lock the balcony door.
General	
	Leave all lab and fish room areas as you found them on arrival.
	Lock up the house.
	Turn off all lights.
	First time visitors need to sign the wall. Please no more than 10 X 10 cm square per person or we will have to paint over it.



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Appendix C. Laboratories, Fish Rooms, and Outdoor Tanks

There is a shared molecular laboratory for genetic work, a phenological laboratory, and a behavior laboratory inside the main CICHAZ building. Outdoors we also have a space for behavior experiments and a multi-use space, the Polymodal Integrative Stimulus Testing Institute, or PIGSTI. If you need a table, please ask for one. Regardless of which laboratory you use, please keep your workspace clean, wash any equipment you use, and return any chemicals or materials to their proper place (shelves are now labeled so please respect this system). Since these are shared laboratories, don't assume that your research team is the only one needing access to a laboratory on a given day.

Laboratory Refrigerators and Freezer

- The **molecular lab** has one refrigerator/freezer that is always plugged in and a minus 80 freezer which is turned on (i.e., plugged in) upon request
- The phenological lab refrigerator/freezer is plugged in upon request
- All items stored in the refrigerator should be labeled with the researcher's name and date.

Communication is essential.

There are rags available for laboratory use in the first drawer on the left side of the sink in the phenological laboratory. If you need additional rags, ask Magda, Johaira or another member of the CICHAZ staff. **DO NOT RAID THE KITCHEN FOR RAGS**. When you are done using a rag, if it is wet, hang it on the back-patio railing or the second-floor balcony railing. Once it is dry, put it into the rag hamper.

There are two indoor fish rooms. The small one is kept cool and is the Serrano or Mountain fishroom. The larger room is kept warm and is the Huasteco or Lowland fishroom. There are also elevated, concrete outdoor tanks as well as large and small grounded tubs. Since there are many research projects going on simultaneously we have created the policies listed below to assure the best fish care possible. We encourage researchers to involve the CICHAZ staff who care for the fish (Don Clemente, Johaira and Doña Magda) in your work as much as possible – both for the success of your project and for their advancement.

22.1 Fish Tank Use Policy

- Before you arrive at CICHAZ, we need to know any fish tank requirements you have and where (Serrano, Huasteco, and/or the outdoor tubs). Please email Gaby Vázquez (aspacgaby@yahoo.com.mx) to find out about available spaces.
- Once you arrive at CICHAZ, Johaira will let you know which racks/fish tanks you can use and will let you know where to keep any materials you are using (she will give you a box or rack space).



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- **Johaira and Magda are in charge of carrying out the protocol for the entry of field fish into tanks (deworming).**
- If you detect water leaks, please mark them and notify CICHAZ staff.
- Johaira and Magda are in charge of feeding the fish, let them know if they do not need to feed yours or if you have any special requirements.

Appendix D. Glossary for non-Mexicans

Transportation

Camión: bus or a truck

Remolque: trailer

Central or *Terminal:* bus station

Food and drink

Vino: wine and also hard liquor, e.g. tequila, rum

Quelites: catch-all term for any leafy vegetable

Empanada: called a gordita in northern Mexico and Texas, thick cooked corn masa stuffed with something yummy. Try the *empanadas de alberjón* from Dona Gelasia.

Tamal: corn masa (polenta) with something yummy in the middle, wrapped in corn, plantain, or (best) *papatla* leaves.

Zacahuil: A megatamal stuffed with pork and spicy sauce. Not to be missed.

Tacos al pastor: deliciousness of Mexican-Lebanese origin: seasoned pork (sometimes chicken) on a shish kabob spit and a little piece of heaven on earth, available at Taquería Bayos and downtown next to the town hall, particularly on weekends.

Quesadilla: either a small grilled cheese taco, or a large taco with a thick tortilla that often, but not necessarily, contains cheese – available evenings from Doña Lulu

Gringa: a grilled cheese taco with *pastor* meat. People will be amused if you are a *gring@* and order this.

Elote: whole ear of corn.



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Esquite: whole corn mixed with mayonnaise, cheese, salt, chile and lime. A lot yummiier than it sounds or looks. *Elotes y Esquites* carts are common in the warmer months and pass by CICHAZ, along with ice cream (*nieves*) carts.

Camote: sweet potato, sold by guys pushing carts that sound a forlorn steam whistle.

Atole: A thin corn porridge, usually flavored with *elote* or chocolate. Lots of artificial flavors too.

Carnitas, suadero: meats sold in taco stands at market, which you should try although better ones are available in Mexico City.

Guanábana: soursop. Sporadically available fresh; often available as a popsicle; exquisite.

Chela: beer.

Chela is a beer and a *Michelada*: is cold beer plus lime juice, chile, salt, and Worcestershire sauce, over ice, often with chamoy and sometimes shrimp lining the rim of the glass. Highly recommended after outdoor work.

Pulque is the traditional indigenous agave beer of central Mexico, naturally carbonated and flavored, sometimes mixed with fruit syrups to make *pulque curado*. Look for roadside signs. if you can stand the crowd of drunks surrounding the place.

Aguardiente (artisanal distilled sugarcane liquor) is best purchased from specialized distillers in nearby Tula, whose products are also available in town. Be careful with cheaper, unlabeled *aguardiente* sold locally.

Mole, adobo: a vast array of rich sauces born from pre-Conquest indigenous cuisine and the Moorish cuisine of al-Andaluz, based on nuts, seeds, chiles, cumin, cinnamon, cloves, tomatoes, tomatillos, bread, and chocolate. Every village and family make it differently. *Xalal* (pronounced *SHA-lal*) is a type of mole made from sesame seeds.

Jicama: crunchy root vegetable peeled and eaten raw by itself, with lime, salt and chile or in salads.

Epazote: An aromatic herb used in cooking, similar to curry leaf.

Tomate (verde): tomatillo.

Jitomate: tomato.



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Milk: *Santa Clara and Lala* are 100% UHT milk, other brands like Mileche and Nutrileche mix milk with vegetable protein.

Chiles

Fresh, from mildest to hottest

morrón (green pepper), *poblano*, *serrano*, *jalapeño*, *caca de rata*, *piquín*, *habanero*.

Dried

Smoky, not too spicy, sweet like sundried tomato. *Ancho*.

Not smoky, *spicy*: *Guajillo*, *cascabel*, *piquín*.

Smoky and spicy from mildest to hottest: *Pasilla*, *güero*, *morita*.

Birria or *barbacoa*: slow-cooked meat tacos and broth from beef, lamb, or goat, served mornings on weekends in Calnali and other places and all week on the Mexico City-Pachuca highway

Barbacoa de pollo: chicken steamed in maguey leaves – interesting but not spectacular.

Limón – lime.

Lima o *lima-limón* – lemon.

Tuna – cactus fruit (prickly pear).

Nuez – pecan.

Nuez de Castilla – walnut (good luck finding it).

Paste: Mexican descendant of Cornish pasty, brought to Pachuca by miners along with soccer. The ones at the Pachuca bus station are ok, the ones at Pastes Dificultad in Real del Monte, en route to Calnali, are exquisite. Bring extra on arrival to CICHAZ and you'll be instantly popular.

Menudo, *mondongo*, or *pancita*: tripe soup, usually found on weekends only.

Fauna and flora

Coralillo: Coralillo. Venomous snake.

Tlacuache: possum (Virginia opossum and other didelphids). Sometimes can be found in *adobo*.

Mapache: raccoon



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Tuza real: paca (*Cuniculus paca*)

Mahuaquite: fer-de-lance. Venemous snake.

Mala mujer: broad leaved stinging plant. Don't touch it!

Escuintle: literally, little dog, also applied to obnoxious children.

Vampiro: bat.

Miscellaneous

La Llorona: legendary ghost-mother who wanders the river bottom at night, crying for her drowned children.

Tianguis – market. Locally just *la plaza* for the Sunday market.

Papalote – kite.



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Appendix E. Emergencies

In the event of a medical emergency, contact Ing. Gaby Vazqu ez and/or Don Clemente’s family immediately as they are up to date on local changes. **For minor emergencies, you can also look for a physician’s office, often connected to a pharmacy.**

If you are traveling as a representative of an institution, you should be aware of their emergency support systems and have relevant contact information **easily accessible**.

Clinics and Hospitals

- A very basic clinic is located in Barrio Tlala southeast of downtown. Here are two private doctors we recommend:
 - Dr. Enrique Monta o – Cel. 771 333 4833
 - Dra. Karina Pedraza – Cel. 771 1166142
- There are also dentists in Barrio Tlala, near the Z calo.
 - Dra. Yuri Pelcastre – Cel. 7712342352
- The next closest 24-hour clinic is called **Hospital Ilusi n/Hospital Regional Tlanchinol** located in Barrio Unidad Deportiva en Tlanchinol, Hidalgo (about 45 minutes away without fog). Phone number +52 7749740242
- The next closest hospitals with somewhat better facilities are as follows:
 - Huejutla de Reyes (2 hours away towards Tampico)
 - Lopez Santos Jorge (~90 min away)
 - Carretera M xico-Tampico 215
43000 **Huejutla de Reyes, Hidalgo**
Phone number +52 78 989 64196
 - Zacualtip n (90 min away towards Pachuca)
 - Centro de Salud de Zacualtipan**
Calle Galeana #2, Col. Centro, C.P. 43200
Zacualtip n de  ngeles, Hidalgo, M xico

For international-class hospitals in Pachuca, Mexico City, or Tampico, call your travel insurance provider.

General First Aid Reminders

- Bring a first aid kit with you on all field trips!
- Direct pressure stops bleeding – apply firm, direct pressure over a bleeding wound.
- Nosebleeds – forward not back! Pinch the soft spot of the nose for 10 minutes and lean forward.
- Running water is best for burns – keep the burn area cool to prevent further damage to skin tissue (do not use butter!)



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- Do not move someone who is unconscious or has a spinal cord injury. Get help immediately.
- Stay calm!
- The first five general rules in an emergency are (**DR.ABCDE**):
 1. Check for **D**anger - site security
 2. Check for a **R**esponse - consciousness level
 - Is the person coherent? Calm?
 - is this person in shock? Cover and hydrate
 3. Open **A**irway.
 4. Check **B**reathing - Need CPR (resuscitation).
 5. Check **C**irculation
 - Look for bleeding and stop it with pressure and a tourniquet.
- Secondary questions to remember (**AMPLE**):
 1. Ask about: **A**llergies, **M**edications, **P**revious medical history, **L**ast meal, **E**vent history (what just happened?)
 2. Look for Signs and symptoms (Swelling? Bleeding? Bruising/Discoloration? Pain?)



Snake Bite Protocol

Avoid snakes by making noise when you walk, always wear close-toed shoes, walk with a stick (the snake can attack that first) and a machete, and have a first aid kit with you. If you or someone in your group is bitten by a snake, **immediately** notify Gaby as well as group leaders. Severe symptoms (see below) may take 12 to 16 hours to appear after a bite - do not wait to seek treatment. Memorize the Do and DO NOT DO lists below!!

TO DO	DO NOT
<ul style="list-style-type: none"> ● Move safely away from the animal that did the biting! If possible, try to ID the snake so doctors will know if it was a venomous species as well as the type of antidote to administer. ● Don't Panic! Keep calm and carry the person, via a stretcher if available, so they do not exert themselves as this accelerates the poison in the body. ● Check the time the accident occurred. ● Remove all objects or clothing that could act as constrictive objects (rings, chains, bracelets, scarves, socks), since it is likely that there will be inflammation of the affected area. ● Gently clean the wound with plain water to remove any debris and prevent infection. ● Cover the area with gauze pads or clean cloths without applying pressure. ● Immobilize the affected area. ● Take the injured person to the nearest health services immediately. 	<ul style="list-style-type: none"> ● Do not allow the person to overexert him/herself. ● Do not apply tourniquets. ● Do not apply hot or cold compresses to the bite area. ● Do not cut the bite area. ● Do not try to suck out the poison. ● Do not give medication to the patient. ● Do not administer anything orally. ● Do not administer traditional remedies ● Do not elevate the affected area – keep the affected area at a lower level than the heart. For example, if the bite was in the leg, do not elevate the patient's legs as this favors the flow of venom towards the heart.

Snake bite symptoms include:

- Pain and inflammation in the area of the bite with subsequent hardening of it.
- Pale coloration in the area of the bite and bleeding at the site of the injury.
- Respiratory distress.
- Nausea and vomiting.



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- Sensation of tingling or numbness.
- Blurry vision.
- Dizziness and general weakness.
- Excessive sweating
- Alterations of consciousness such as confusion or loss of consciousness.
- Bleeding from gums, nose or urine.

Note that there are lots of snakes you will encounter while doing field work that are NOT venomous and good to have around (like the Mexican black kingsnake that helps control rodents). The snake you should be most wary of and could encounter in the field is the *Bothrops asper* or *fer-de-lance* (*mahuquite* in Nahuatl/ local Spanish – learn the name!). *Micrurus bernadi* Coral snakes (coralillo in Spanish) are around but not as concerning – DO NOT HANDLE THEM. The information below is meant to orient visitors and **is not a comprehensive field guide**.

Bothrops asper or Fer-de-Lance (Mahuquite in Nahuatl/local Spanish)



- Most commonly found in forest areas and along riverbanks.
- These snakes are usually olive green with dark markings but its color varies depending on the habitat.
- They have a ‘V’ shaped head (think spearhead) and can be 5 to 9 ft long.

References:

- <https://striresearch.si.edu/ss/panama-information/emergency-instructions/>
- <https://www.actuamed.com.mx/informacion-pacientes/primeros-auxilios-en-caso-de-mordedura-de-serpiente> (Use Google Translate for English text),
- https://www.redcross.org/content/dam/redcross/atg/PDFs/Take_a_Class/FA_CPR_AED_PM_sample_chapter.pdf?srsltid=AfmBOor6fMWgK8ZTi63rflfJM7EQ4O26x8yV3MPZxykbLHcku_h9mAfh
- chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.redcross.org/content/dam/redcross/atg/PHSS_UX_Content/FA-CPR-AED-Spanish-Manual.pdf (In Spanish)