

# Costa Rica



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## Organization and Staff number

Ministry of Public Education, Student Life Directorate. Health and Environment Department

Funding by:

Not applicable

## Contributing organizations/individuals:

Universidades Estatales: UNED Universidad Estatal a

Distancia UNA: Universidad Nacional

UCR Universidad de Costa Rica

## GLOBE Schools:

La Gran Samaria

Liceo Experimental Bilingüe de Belén

Colegio Técnico Profesional CIT

Liceo Regional de Flores

Escuela San Francisco de Peñas Blancas

Liceo de Santo Domingo

Escuela de Excelencia Mercedes Sur

Liceo Ing.Samuel Sáenz Flores

Complejo Educativo Nueva Esperanza

Primaria CIT

Departamento Salud y Ambiente MEP

Escuela Llorente de Flores

Liceo Mario Vindas Salazar

Escuela Fidel Chaves Murillo

Escuela Ulloa

Areas of the GLOBE protocol:

Atmosphere, Biosphere, Mosquitoes, Trees.

Number of schools that reported data during the past year:

In progress

Programme implementation, international cooperation in the GLOBE network and activities during the past year (categorized by the objectives of the GLOBE strategic plan 2018-2023):

It has been a challenge to motivate participation in the GLOBE program. Discussions and workshops have been held to address the contents of the protocols, however, participation in recording data in the respective database of the program is not reflected.

It is expected that with the actions that have been carried out during this time, we will be able to record and have greater and better participation in 2024-2025.

Education:

- **Workshops on GLOBE Environmental Protocols:** Organization of workshops for teachers and students on the implementation of protocols such as Atmosphere, Biosphere, and Mosquitoes. Workshops held in Heredia, Limón, and Talamanca.
  - **Objective:** To make known and train teachers and students in the use of GLOBE protocols, such as Atmosphere, Biosphere, and Mosquitoes, so that they can collect environmental data accurately and systematically.

The workshop held in collaboration with the LAC Regional Office, held from April 16 to 19, at the CIT Educational Complex in the city of Asunción de Belén in Heredia, stands out.

With the assistance of 29 certified teachers and the cooperation of renowned trainers: Mariana Savino and Claudia Caro Vera, technical experts of the GLOBE Program.

- **Delivery of Teacher Training Programs:** Workshops were conducted for educators on scientific methodologies and the use of GLOBE tools. These workshops were held at the Regional Educational Directorate of Heredia.
  - **Objective:** Strengthen educators' pedagogical and scientific mediation by providing them with methodologies and tools for teaching community science, such as the guide developed by Dr. Nikki Grant.
- **Projects for Educational Centers with Scientific Actions:** Promote scientific projects in schools that involve data collection and analysis using GLOBE protocols.
  - **Objective:** Encourage collaboration among students from different schools on scientific research projects, promoting practical learning.



and the application of the scientific method. This work was built at the Escuela Lider Mercedes Norte and at the CIT.

### Science

- **Workshop on Mosquitoes vs. Climate Change Research:** Create awareness and engage students in collecting data on mosquito presence and the impact of climate change in their community. Workshops held in Limón and Talamanca.
  - **Objective:** Raise students' awareness to analyze the presence of mosquitoes in relation to climate change effects in their community through observation and real data, enhancing their understanding of this global issue.
- **Biodiversity Monitoring, Specifically Trees:** Discussion to implement tree species monitoring programs using GLOBE Tree protocols and information provided by GLOBE in webinars. Discussion held in Talamanca with ARA teachers.
  - **Objective:** Introduce and implement tree monitoring programs that eventually allow students to observe and record tree characteristics.
- **GLOBE Presentation to Promote GLOBE at Science Fair:** Present GLOBE protocols to enhance the institutional Science Fair by visualizing activities that enable students to conduct experiments on air and water quality using GLOBE data. This presentation was given at the Regional Educational Directorates of San Ramón and San Carlos.
  - **Objective:** Discuss with teachers the opportunities GLOBE offers to facilitate understanding of scientific concepts through practical experiments, using GLOBE protocols to obtain accurate and contextualized data.

### Community

- **Reforestation Campaign in Turrialba:** Organization of a community event to plant trees and monitor their growth using the Tree protocol. The community of Turrialba was supported in tree planting and introduced to GLOBE protocols.
  - **Objective:** Increase tree coverage and improve air and soil quality in local communities, while informing the public about the importance of trees in urban ecosystems and the existence of GLOBE.
- **GLOBE Talk within the Blue Flag Program for Educational Centers:** Engage the educational community in activities that promote sustainability and environmental protection using GLOBE protocols, such as river and park clean-up events.
  - **Objective:** Raise community awareness about the importance of sustainability and environmental protection within the framework of the Blue Flag Program and the GLOBE Program.



- **Planning for Science Fairs with Universities:** Organize public science fairs where students can share their projects and discoveries related to the environment. These actions have been discussed in various meetings with the National University and the Distance State University.
  - **Objective:** Create a space for students to learn about GLOBE, share their scientific projects with the community, and foster interest in the sciences and participation in field-based environmental activities.

### Technology

- **Information about GLOBE Platforms:** Provide access to GLOBE's online tools for data collection and visualization in school projects. This informational activity was conducted through all events, starting from the launch in April.
  - **Objective:** To familiarize students and educators with the use of GLOBE's online platforms, enhancing their ability to visualize and analyze scientific data in real-time.

### Communications

- **Promotion in Academic Actions:** Utilize academic and social meetings to disseminate information about GLOBE protocols.
  - **Objective:** To expand the reach of GLOBE initiatives by spreading educational content, thereby increasing the program's visibility and public engagement.
- **Socialization and Participation in Webinars and Virtual Conferences:** Invite and participate in online activities to share knowledge, experiences, and best practices among GLOBE participants at the regional and international levels.
  - **Objective:** To leverage opportunities provided by the Regional Office for knowledge and experience exchange, strengthening the network of collaboration and mutual learning among GLOBE members regionally and globally.



Plans and Ideas for the Coming Year:

- Coordinate with State and Private Universities for Collaborative Work on GLOBE Protocols.
- Focus GLOBE on Five Educational Directories in the Country, Where Awareness Efforts Have Been Made and Implementation is Expected by 2025.
- Increase Enrollment and Registration of GLOBE Schools Through the Blue Flag Program for Educational Centers.
- Expand Community Participation: Engage More Schools, Students, and Communities in Citizen Science Projects.
- Organize Science Fairs, Presentations, and Conferences to Share GLOBE.

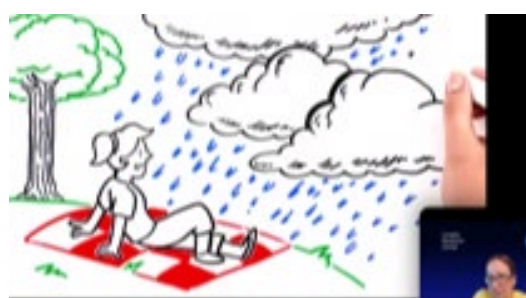
The following is an overview of the GLOBE activities in which we have participated.

*Photos*

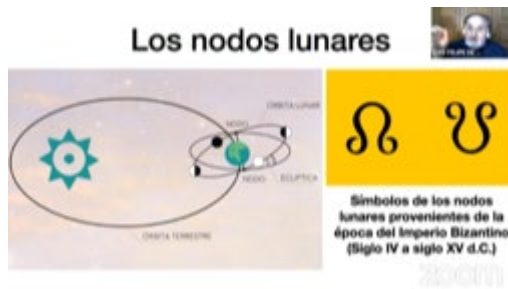
*GLOBE Program and p.h. D Nikki Hoffman meeting, DSA-MEP, 2023 October 4*



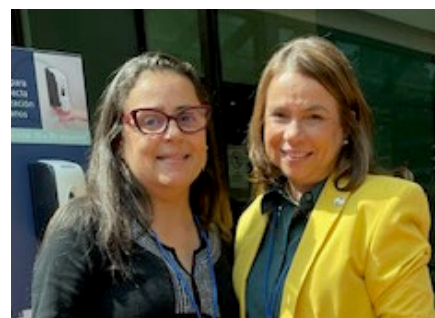
*Meeting on the Effects of Climate and Cosmic Rays, the Eclipse, October 5, 2023*



Meeting: *The Darkness that Illuminates Us – The Eclipse, October 5, 2023*



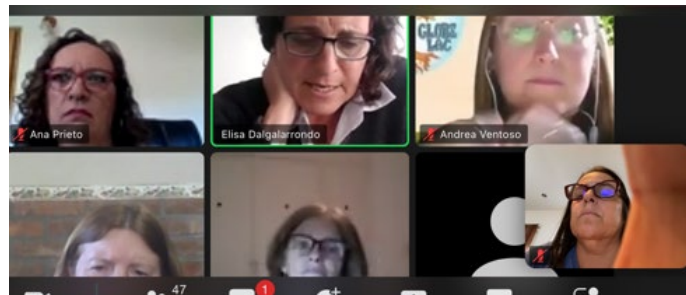
Regional GLOBE Meeting, Panama, October 12, 2023



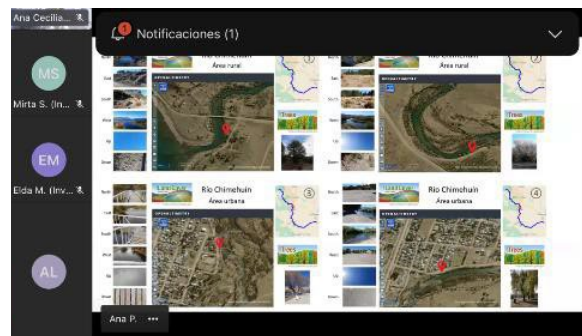
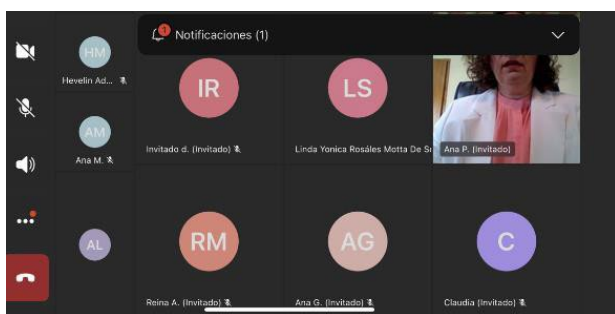
Meeting, Report Presentation, and GLOBE Survey, October 25, 2023



Meeting: "Trees within LAC" Campaign - "Urban Forestry in Climate Change Adaptation Strategy" October 26, 2023



Virtual Workshop Meeting for GLOBE Educators. November 10, 2023





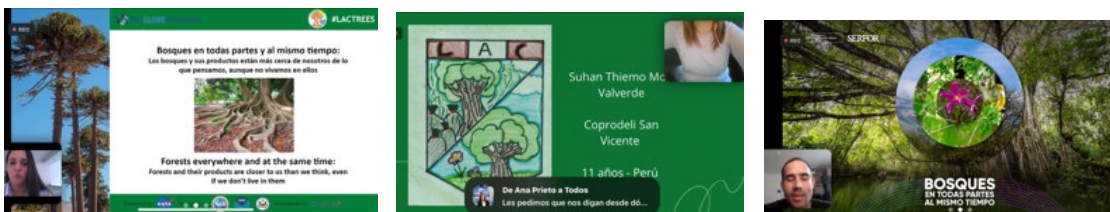
Workshop Meeting "Trees within LAC: Traditional Uses of Tree Species"  
November 16, 2023



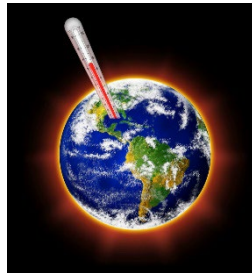
Meeting with the U.S. Embassy GLOBE  
November 30, 2023  
GLOBE Agreement between the U.S. and Costa Rica



Meeting Campaign "Trees within LAC": "Forests Everywhere and at the Same Time"  
December 7, 2023



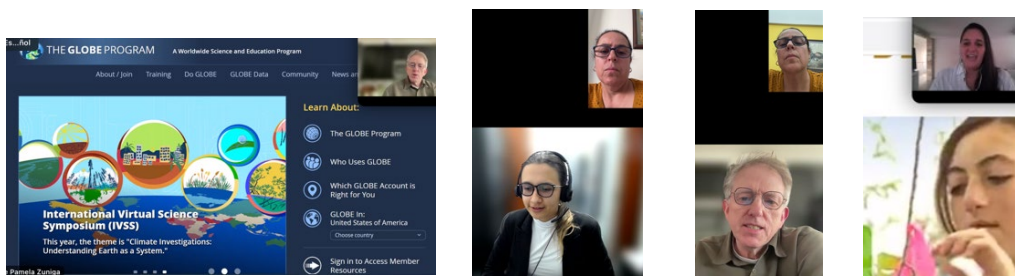
Participation in GLOBE Webinar  
January 22, 2024



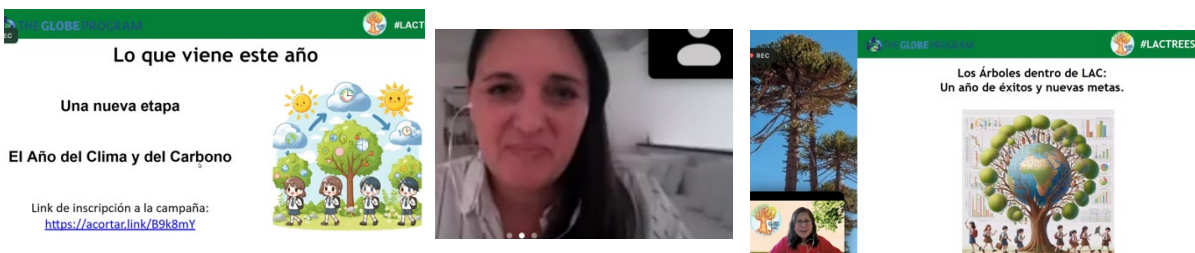
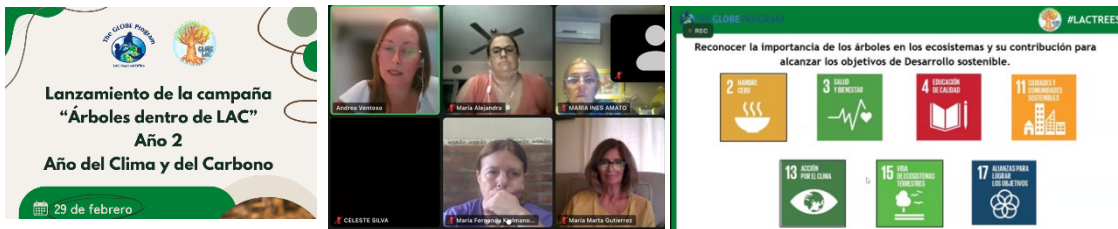
YCC Webinar: NASA's  
Global Precipitation Mea...

Programado: hoy, 9:00 a. m.

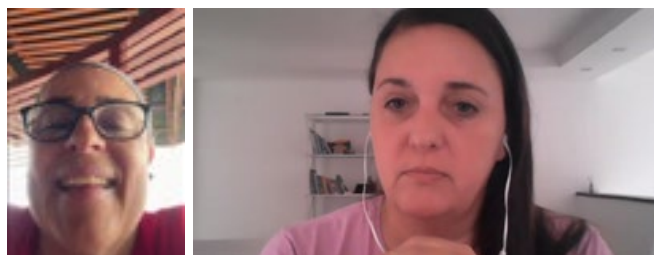
Meeting: Introduction for the Relaunch of GLOBE Costa Rica February 26, 2024

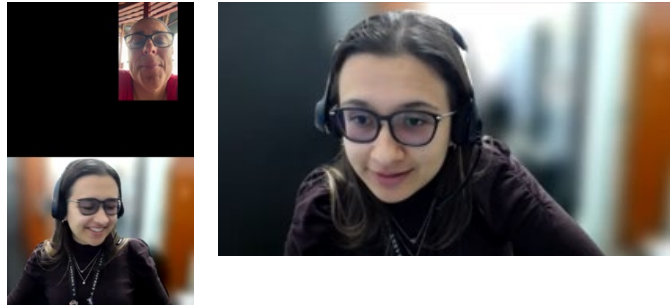


Meeting: GLOBE Campaign "Trees within LAC" February 29, 2024



GLOBE Program meeting, 2024 March 1

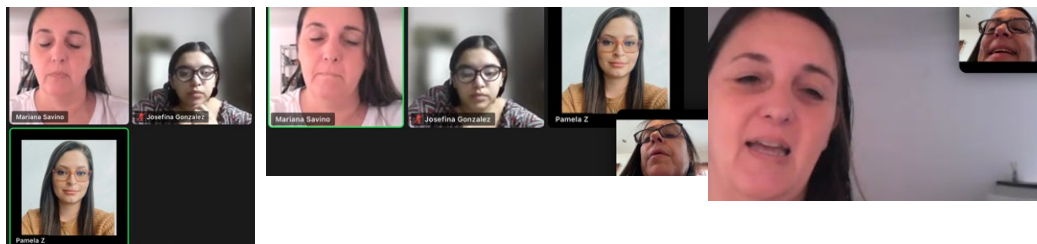




GLOBE Coordinators Meeting. March 6



GLOBE Costa Rica Workshop Relaunch Meeting. March 8, 2024

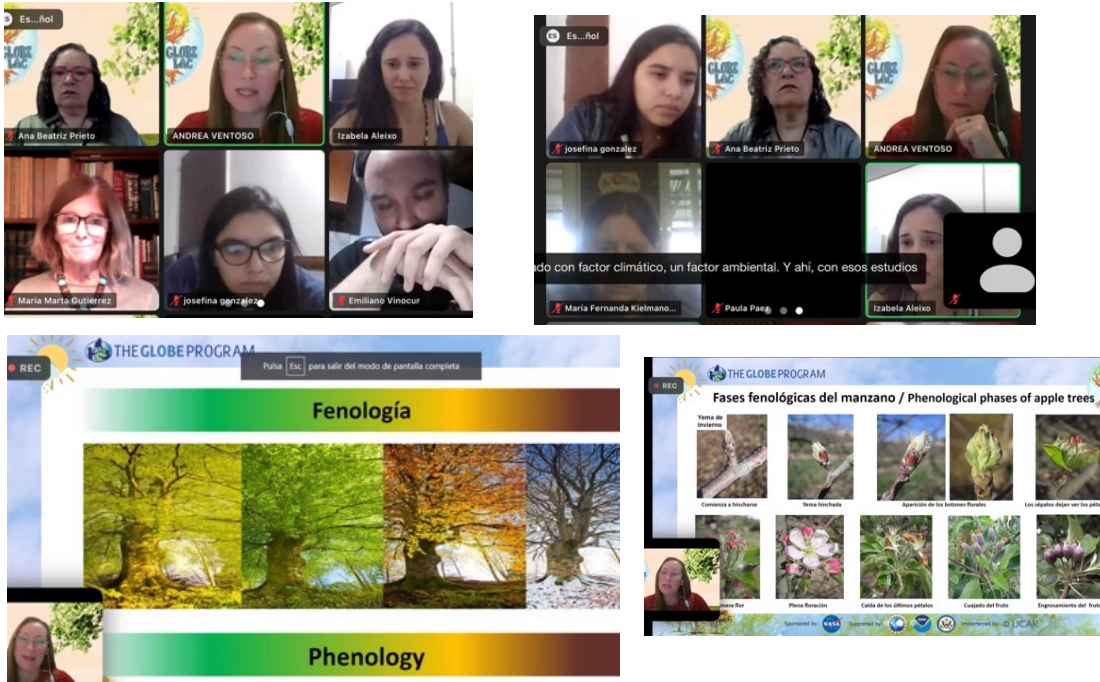


First meeting of the GLOBE Virtual Workshop on Biosphere and Atmosphere. March 13

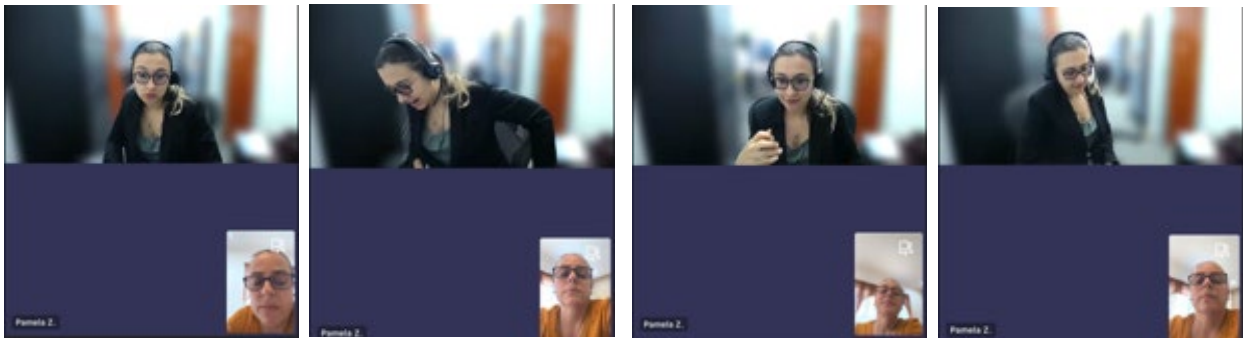




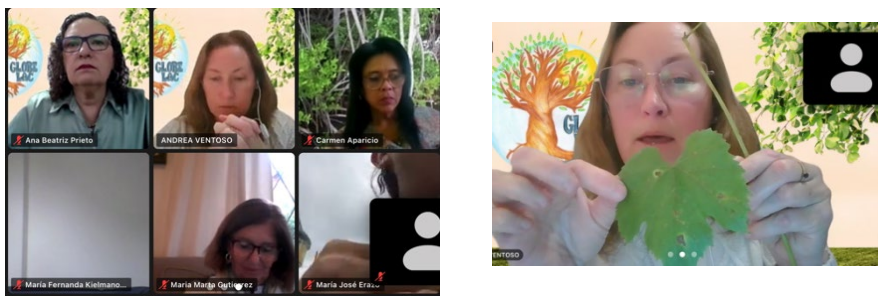
GLOBE Meeting. Campaign "Trees within LAC on Climate and Carbon. 21 March 2024



GLOBE Program Meeting. April 2, 2024



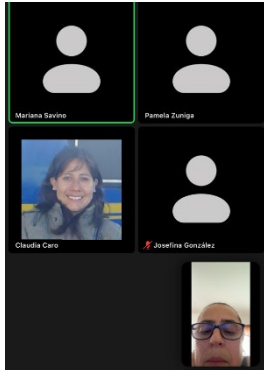
GLOBE Biosphere and Atmosphere Introduction Workshop and Meeting. Land Cover. April 3







GLOBE Biosphere and Atmosphere Workshop preparation and logistics meeting. April 12, 2024



Materiales y tareas	Responsables
Juego de los ODS Y GLOBE	Claudia
GPS	Claudia
5 velas pequeñas o misioneras, 5 platos de te pequeños, 5 vasos de vidrio, agua y fosforos	Ana Lorena o Pamela
Velas: Claudia	
Vasos, platos y fosforos: Pamela.	
Papel bond celeste (30) , algodón (2 paquetes pequeños) y goma (5)	Ana Lorena o Pamela
5 Botellas de plástico de agua que sean lisas sin muchas formas, y 5 tijeras	Ana Lorena o Pamela
Cono del rollo de papel higiénico	
Cinta adhesiva	
Arandelas, hilo dental y pajilla	
Tiras reactivas de pH (1 caja)	Ana Lorena o Pamela
Termohigrómetros	Mariana y Claudia
Termómetros de temperatura superficial	Mariana
Árboles para actividad de aprendizaje	Claudia
4 Brújulas	Ana Lorena o Pamela
Ovillo de lana	Claudia
Cinta métrica	Mariana y Claudia
Brújula	Ana Lorena o Pamela
5 Globos con palillos de soporte	Ana Lorena o Pamela
Reglas	Ana Lorena o Pamela
Vaso con hielo	Ana Lorena o Pamela

Materiales y tareas	Responsables
Juego de los ODS Y GLOBE	Claudia
GPS	Claudia
5 velas pequeñas o misioneras, 5 platos de te pequeños, 5 vasos de vidrio, agua y fosforos	Ana Lorena o Pamela
Velas: Claudia	
Vasos, platos y fosforos: Pamela.	
Papel bond celeste (30) , algodón (2 paquetes pequeños) y pegamento (5)	Ana Lorena o Pamela
5 Botellas de plástico de agua que sean lisas sin muchas formas, y 5 tijeras	Ana Lorena o Pamela
Pluviómetro	
Jaerita medidora	
GPS: del rollo de papel higiénico	
Cinta adhesiva	
Arandelas, hilo dental y pajilla	
Tiras reactivas de pH (1 caja)	Ana Lorena o Pamela
Termohigrómetros	Mariana y Claudia
Termómetros de temperatura	Mariana

In-Person Workshop: Biosphere, Atmosphere Globe April 16, 17 and 18, 2024 Photos from day 1



Biosphere Workshop. Day 2

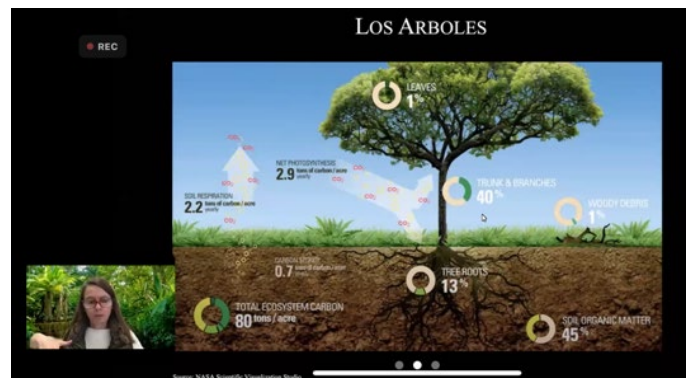




*Environmental visit to the San Francisco de Peñas Blancas school and the Arenal National Park.  
Day 3*

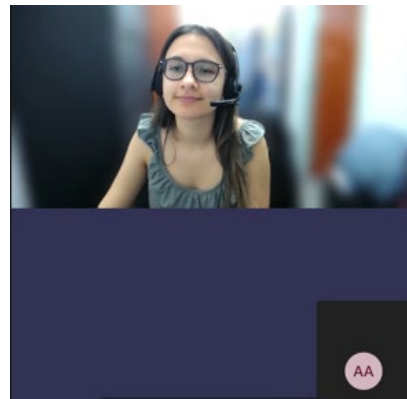
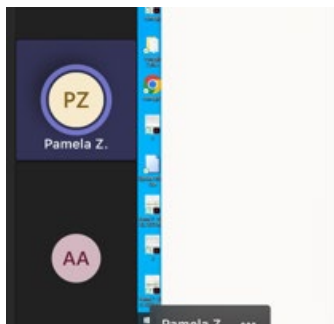


*GLOBE Meeting on Carbon, Sequestration through Oceans, Wetlands and Mangroves. Carbon Reservoirs. 25 April 2024*





Meeting on the June 21 Workshop on Environmental Protocols. GLOBE April 25, 2024



GLOBE Biosphere and Atmosphere Meeting and Workshop. April 30, 2024





GLOBE Biosphere and Atmosphere Meeting and Workshop. April 30, 2024

**U2**

Especie: *Chorista speciosa* (Palo borracho)  
 Altura: 5.01 m  
 Ubicación: Ha sido descrita  
 Fase fenológica: Floración



Criterio	Excelente (5 puntos)	Bueno (3 puntos)	Regular (1 punto)
Criterios técnicos	x		
Creatividad y belleza		x	
Impacto emocional	x		
Adecuación al tema	x		

CATEGORÍA UNIVERSITARIA CONCURSO FOTOGRAFÍA	CATEGORÍA PRIMARIA CONCURSO FOTOGRAFÍA	CATEGORÍA SECUNDARIA CONCURSO FOTOGRAFÍA
Calificación CAT...	Calificación CAT...	Calificación SEC...

GLOBE Meeting Organization Activity June 21, May 15, 2024



GLOBE Meeting "Trees within LAC" Campaign. May 16, 2024



**Qué Hacer ANTES** **Qué Hacer DURANTE** **Qué Hacer DESPUÉS**

**Mantente informado!** Con un móvil o computadora en el escritorio, suscríbete en las páginas de redes sociales y canales de televisión de tu localidad.

**Reporta situaciones!** Si ves o escuchas algo que sea peligroso o que afecte a tu comunidad, reportalo.

**Mantente siempre despierto!** Si estás en un lugar que no sea tu casa, asegúrate de estar alerta y atento.

**Si hay tormenta eléctrica** En la playa o cerca del río, asegúrate de salir de allí lo más pronto posible.

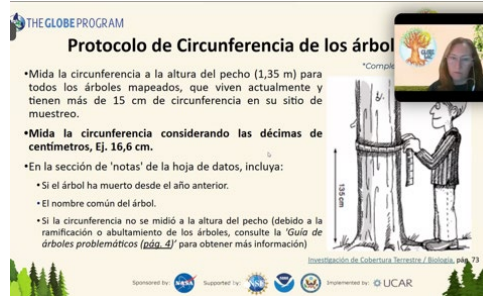
**Desenchufa artefactos eléctricos** Los computadores, el móvil, y el equipo de audio, asegúrate de desenchufarlos.

**Informe a las autoridades** Si ves o escuchas algo que sea peligroso o que afecte a tu comunidad, reportalo.

**Consérvete la calma** Sigue las instrucciones de los oficiales de emergencia.



Biosphere and Atmosphere Meeting and Workshop - May 21

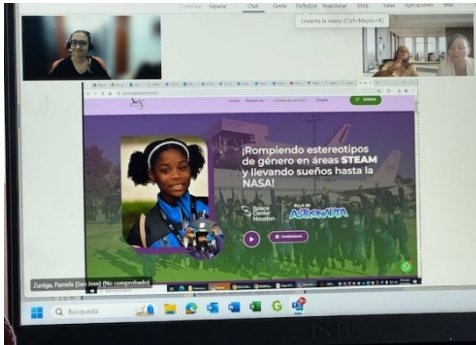


GLOBE Meeting, June 5, 2024





Meeting with the Director of Student Life. June 13, 2024  
Topics: CO, SAN, GLOBE



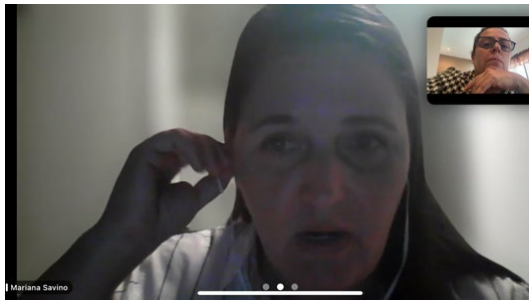
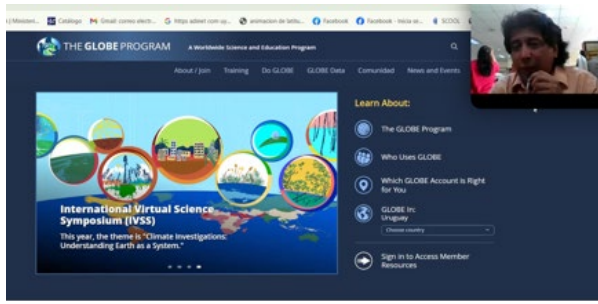
Meeting with GLOBE coordinators and members. June 13, 2024



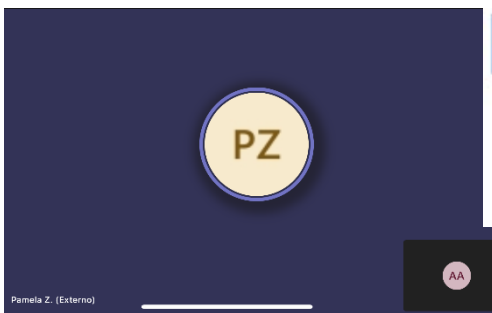
GLOBE LAC | Reunión de Coordinadores y Miembros de Grupos de Trabajo |



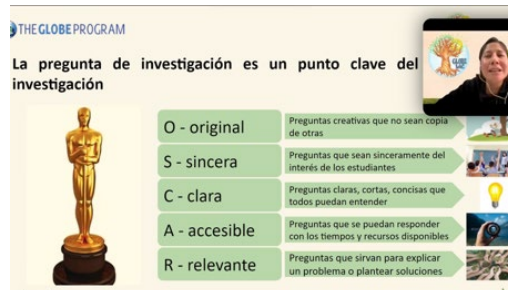
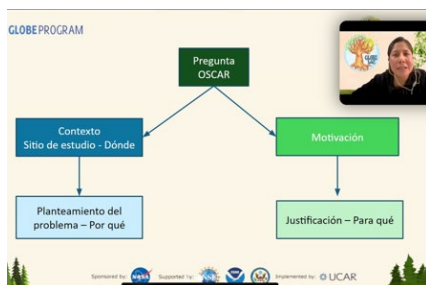




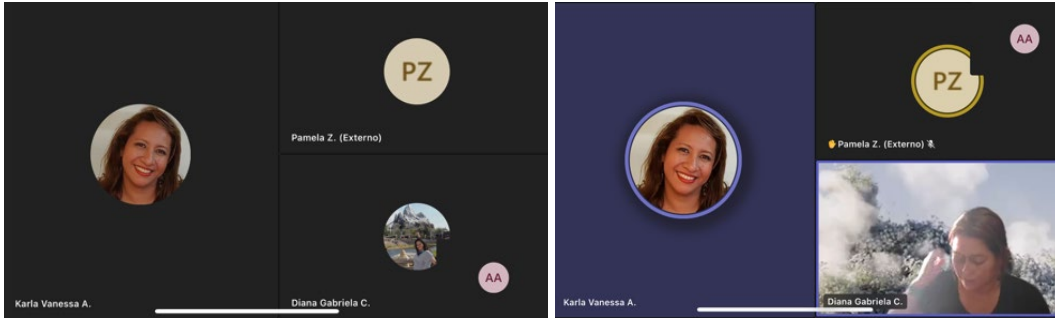
Meeting with US Ambassador details of Rossane Low's visit - GLOBE. June 17



GLOBE Workshop, Biosphere and Atmosphere. June 19, 2024



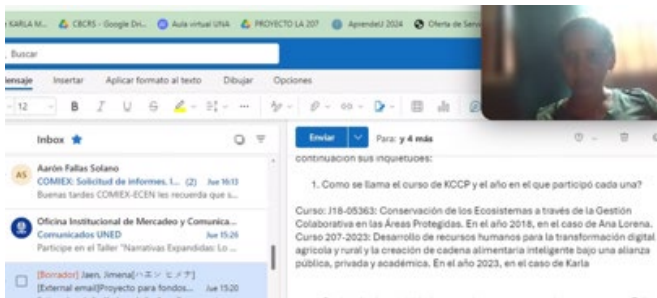
Meeting of the Regional Directorate of Heredia and the US Embassy. June 20  
Follow-up to the Workshop from April 16 to 19



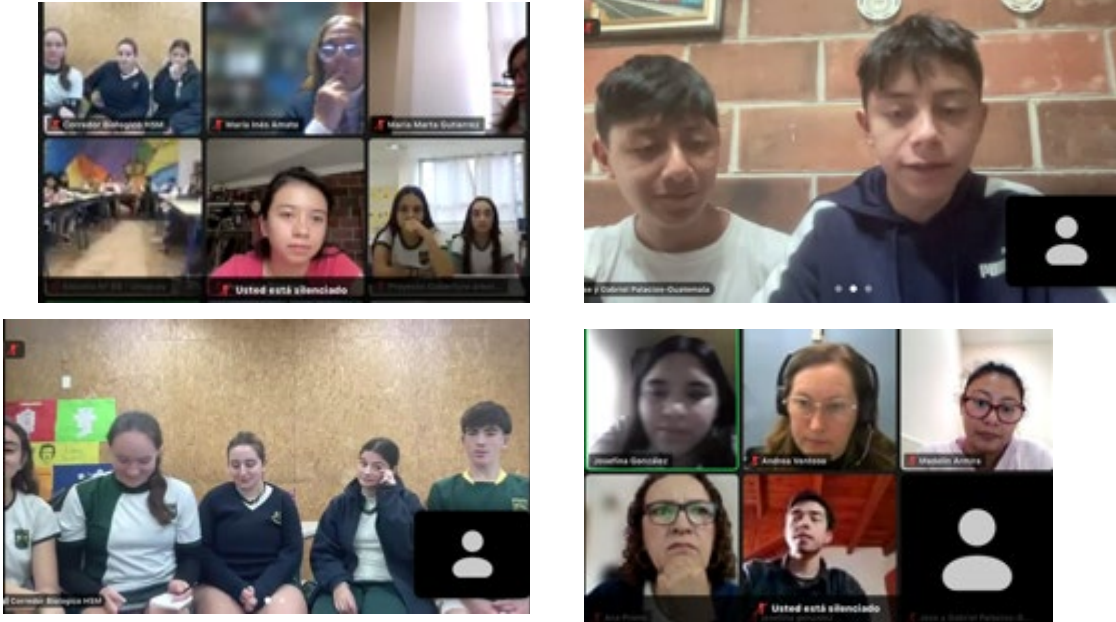
GLOBE-Fidelitas University Follow-up Workshop. June 21



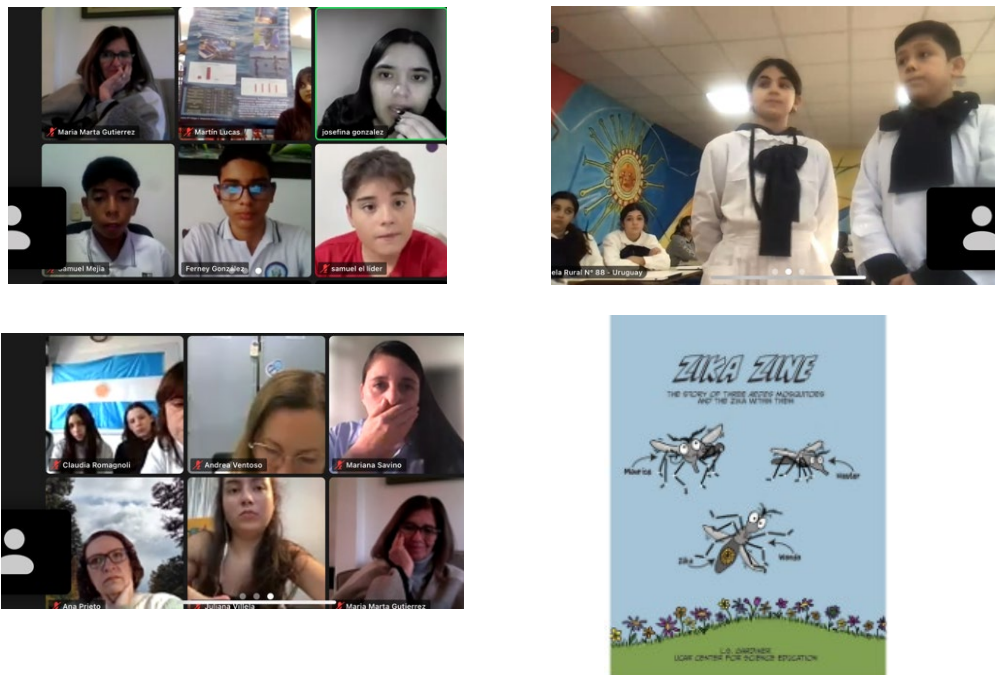
GLOBE-Fidelitas University Follow-up Workshop. June 21



GLOBE LAC Virtual Science Fair. June 25

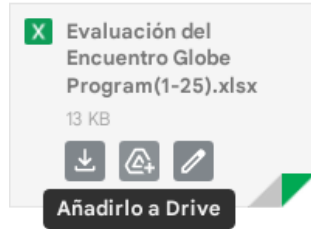


Day 2. GLOBE LAC Virtual Science Fair. June 26, 2024

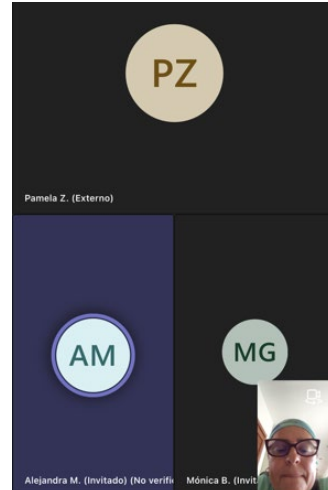
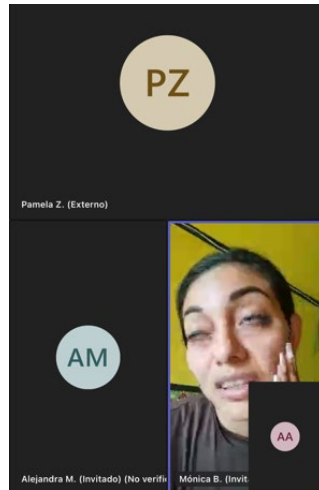
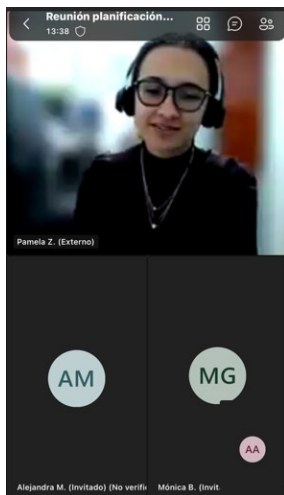




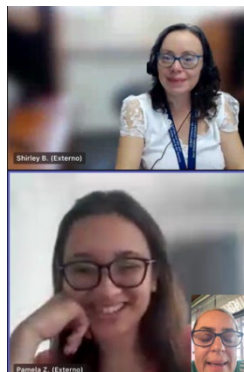
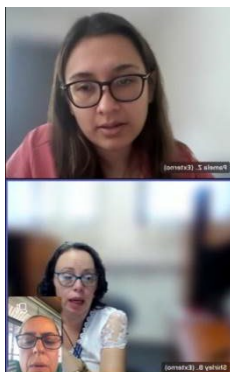
Analysis of Forms GLOBE evaluation results. June 26, 2024



GLOBE Project meeting with Limón coordinators. July 5, 2024



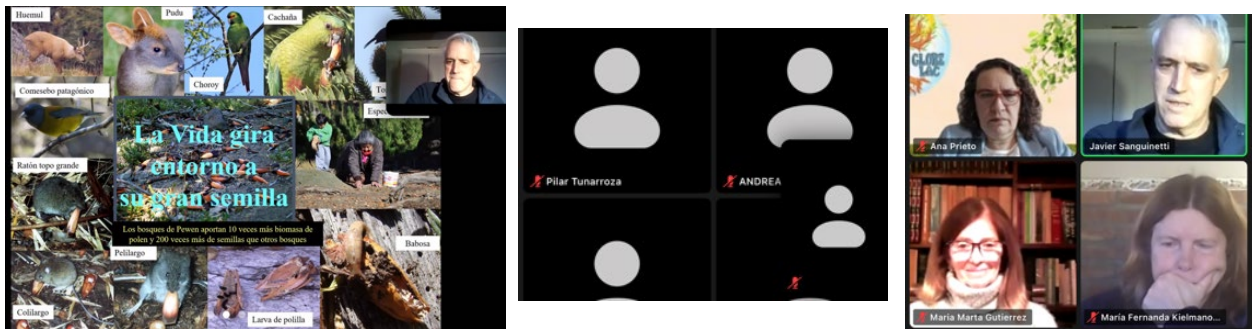
GLOBE Meeting, Rusty Low Activity. July 11, 2024



Mosquito Protocol Workshop, Bribri-Talamanca Leader School. July 22, 23 and 24, 2024



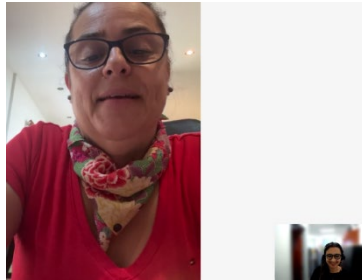
GLOBE Meeting "Importance and curiosities of Araucaria forests in Southern South America" Campaign "Trees within LAC". July 25, 2024



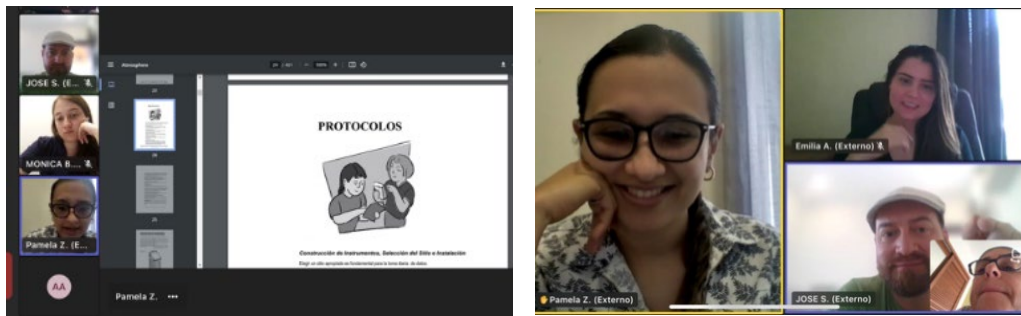
Mosquito Protocol Workshop at Limoncito School. July 19 and 26, 2024



GLOBE meeting, Rusty Low visit. July 30



Meeting of the National University, US Embassy, GLOBE program. August 1, 2024



GLOBE Work Day, August 5, 2024

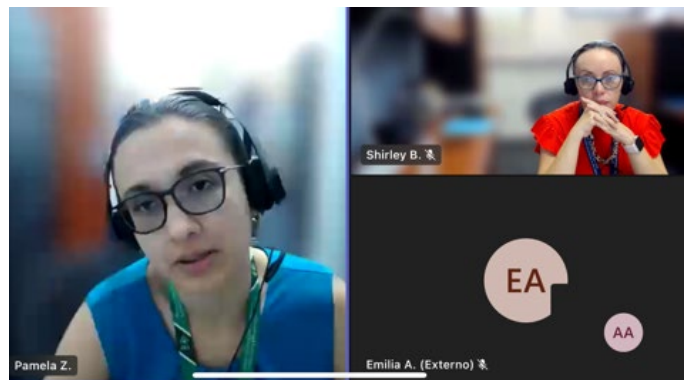
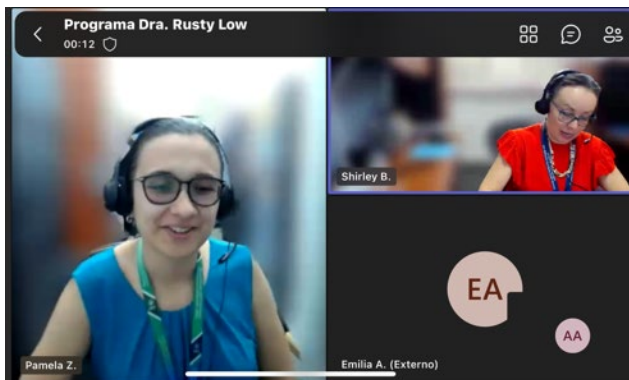




*GLOBE Project Meeting - vectors - environment. DRE San Carlos and DRE Occidente*



*Vectors Commission Meeting, GLOBE, August 8, 2024  
Visit of Dr. Rusty Low, participation of MEP Regional*





*"Trees within LAC" Campaign Meeting, "Understanding Precipitation: Key Concepts, Records and Impacts". August 16, 2024*



*GLOBE Commission Meeting. August 22, 2024*

