



DU de México Overview - Human Dimensions

DU de México Overview and Program Highlights

Since its founding in 1974, Ducks Unlimited de México (DUMAC) has delivered science-based wetland restoration solutions that provide clean water, open spaces, and healthy environments for people and wildlife.

DUMAC's primary focus is on reversing hydrologic degradation to restore mangrove and seagrass systems, mapping wetland resources, protecting and improving local water quality through the installation of water treatment plants and dry toilets, and educating natural resource managers across Central and South America. DUMAC's programs focus heavily on working with local communities to design and deliver conservation and steward projects. Many of these communities rely on livelihoods such as fishing, hospitality, or ecotourism that benefit directly from these projects.

Several Ducks Unlimited de México workshops and training programs are held at the John E. Walker Research and Training Center. The facility is named in honor of the late John E. Walker III, whose dedicated service to DU spanned three decades. The center is located within the Ria Celestún Biosphere Reserve on the Yucatán Peninsula, which encompasses more than 200,000 acres of mangrove swamps.

Non-Traditional Work: Water Quality Improvements

DUMAC has a program to improve the quality of the water that flows to priority wetlands through integrated watershed management. To achieve this, we ensure participation and involvement of local communities so that they become part of the solution in conservation processes throughout the country.

Projects include the sanitation of water through the construction/rehabilitation of domestic wastewater treatment plants and the installation of eco-techniques (dry toilets and biodigesters) in rural communities. This improves the quality of water in the receiving wetlands, as well as improving the quality of life of communities that live in a highly marginalized situation by providing them with structures to meet their basic needs.

Impact to Date:

- **Built/rehabilitated 9 wastewater treatment plants located in rural locations in the Cuitzeo lake basin in the state of Michoacán, with which we are treating the wastewater produced by 7,684 people (annually treating ~318,318,69 m³ of wastewater).**
- **Installed 590 eco-technologies (dry toilets and biodigesters) in 56 highly marginalized rural locations in the state of Michoacán, Jalisco, and Guanajuato, benefiting 2,683 people, retaining 263.73 m³ of solid waste and treating 3,943.56 m³ of wastewater.**



RESERVA Program: Education



The RESERVA program, which was launched in 1989, was the first internationally focused, hands-on education program for natural resources professionals in Latin America. RESERVA is dedicated to training and improving the professional skills of those who are responsible for the management and conservation of natural resources. **This program has been involved in more than 82 research projects, providing in-the-field training to more than 2,000 professionals from 24 countries.** RESERVA provides instruction in a variety of conservation disciplines, including environmental education, conservation biology, social research, land management, environmental planning, and habitat restoration.

In 2022, DUMAC held the 51st and 52nd editions of the program, where 18 professionals from 8 countries in Latin America and the Caribbean were trained.

As part of the multiplier effect, the graduates of the RESERVA program have developed more than 57 workshops, training more than 1,650 professionals in different RESERVA topics and expanding the benefit of the program.



Farmer Training

DUMAC conducts a variety of workshops each year to help educate farmers, ranchers, teachers, and others about sustainable practices that conserve wetlands. Agricultural workshops are held in rural areas to help producers adopt practices that reduce the discharge of chemicals and fertilizers into wetlands and waterways. Producers learn how to rotate crops to prevent erosion and soil loss as well as to prepare their own organic fertilizers and pesticides. Moreover, livestock and pasture-management workshops are offered to help ranchers improve forage production while also limiting erosion and improving watershed health. **DUMAC trained 357 farmers in 2022 and plans to train another 325 in 2023.**



Professional Training- Government and Civil Organizations

DUMAC holds workshops to educate professionals and technicians from federal, state, and municipal agencies, as well as civil organizations. For example, in December 2022, we conducted the virtual seminar called "Workshop on Wetland Ecology and Waterfowl." **During the two-day workshop, 116 professionals participated from 65 organizations of Federal, State, and Municipal government agencies, and non-government organizations from 19 states of Mexico, directly related to the conservation, management, and sustainable use of wetlands and waterfowl.**

Train the Trainers Program

The Training the Trainers program was developed to help teachers strengthen environmental education in primary and secondary schools. This program has been accredited by the University of Guadalajara and has been granted curricular value by Mexico's Ministry of Education. As a complement to these courses, DUMAC provides teaching guides and other tools to help educators incorporate conservation education into their classrooms.

- In 2022, we trained 498 teachers, and we plan to train 300 teachers in 2023
- DUMAC and the University of Guadalajara trained 130 teachers to better incorporate environmental education components into their daily class curriculum. These workshops involved 1,315 students from elementary and secondary schools.

