Conceived as an efficient structural system, a 200-meter square wooden dock with variable height integrates social and ecological programs, promoting both communal recreational use and the regeneration of a fragile ecosystem.

Keywords: Public space, care, landscape, biodiversity, infrastuctural turns
ECOPARQUE BACALAR / BACALAR ECOPARK

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Colaborador / Contributor: Fernando Rodríguez, Montserrat Loyola, Dino del Cueto, Santiago Blanco, Carolina Andrade, Karim Gómez
Ubicación / Location: Bacalar, Quintana Roo, México
Cliente / Client: Secretaría de Desarrollo Agrario, Territorial y Urbano, Gobierno de México; Municipio de Bacalar
Cálculo estructural / Structural engineering: Óscar Trejo
Ingeniería mecánica y eléctrica / Mechanical and electrical engineering: Spl, Riparia
Estrategias de bioremediación / Bioremediations strategies: Taller Nuevos Territorios
Estrategias de restauración de manglares / Mangrove reparation strategies: Claudia Teutí, Jorge Herrera

Otros consultores / Additional consultants: Luisa Falcón, Juan Ansberto, Luz en arquitectura, Pedro Lechuga, TEMAS MX
Museografía / Museography: Luisa Falcon, Laguna
Contratista / Construction: Zenith
Presupuesto / Budget: 1,100,000 USD
Superficie de terreno / Site area: 70,000 m²
Superficie construida / Built area: 1,900 m²
Año de proyecto / Project year: 2019-2021
Año de construcción / Construction year: 2022
Fotografía / Photography: Rafael Gamo

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Bacalar Lagoon is the largest freshwater bacterial reef in the world. It is one of the few places where there are living stromatolites, an invaluable evolutionary treasure. It is also the only remaining mangrove on the shore of the lagoon of Bacalar and it is enormously fragility due to the growth of urban sprawl.

The main strategy of the project was to minimize the requested program so as to intervene the site as little as possible and open the possibility to wander through the natural richness of its flora and fauna. A square pier of 200 m per side was built, facing north and with variable height so as not to touch the mangrove or the trees, and provided with a platform so the visitors can glide over the lagoon. The closed spaces house a research laboratory and services, which can extend to a shade plain by means of tall trees.

We designed an efficient structural system, built with local and certified chicozapote wood, finding the right measure to be column, lock, and foundation at the same time. In addition, we strengthened the landscape strategy by reducing construction, designed to mitigate the contamination of the town’s water runoff through natural filters, hollows and rain gardens, as well as by the rehabilitation of the degraded mangrove.

Finally, we added a scaled-down museography to the tour in the way of a timeline of 10,000 years, in which the history of this unique biodiversity was engraved on wood. Thus, we invite the visitor to become aware and preserve the place, as well as the social management of a public and free space for the inhabitants of Bacalar.
Planta nivel servicios / Ground floor services plan

Leyenda / Legend
1 Manglar / Mangrove
2 Vaciado / Hollow
3 Recepción / Reception
4 Oficina / Office
5 Baño / Toilet
6 Laboratorio / Research laboratory
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Member of the Sistema de Creadores de Arte since 2019 and a full member of the Academy of Architecture of Mexico since 2021. She co-founded Reconstruir MX and Colectivo C733. She has been an academic at UNAM since 2003. She has been directing her studio (Taller Gabriela Carrillo) since 2019.

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Architect, Universidad Autónoma de México (UNAM), 2008. Master in Intervention of Contemporary Architecture in Historical Heritage, Universidad Autónoma de México (UNAM), 2012. He is a tenured professor at the same university. Together with Carlos Facio he founded the architecture studio TO in 2015. He co-founded Colectivo C733 in 2019.

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Architect, Universidad Autónoma de México (UNAM). In 2018 he founded his own architecture studio which has focused on housing, public, and cultural space projects. He co-founded Colectivo C733 in 2019.

Eric Valdez  
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Architect, Universidad Autónoma de México (UNAM), 2006. Currently pursuing a Master’s degree at the same university, where he is also a faculty member. He is the founder of labg, a company dedicated to the design and construction of lightweight structures. He is a partner of Colectivo C733.