Project Statement and Rationale

The ICPP contributes to the protection of biodiversity and critical habitats by connecting research, education and conservation efforts in the region with Comca’ac (Seri) traditions, knowledge, self-determination and conservation practices in their territory.

◊ The Comca’ac knowledge of the cultural and ecological landscape is important within modern resource management constructs and the protection of their territory.
◊ Collaborations between the Center and Comca’ac groups will inform and enrich student experiences and regional education, conservation and research initiatives and will lead to opportunities for greater Comca’ac learning, leadership development and sustainable livelihoods.
◊ Equitable and effective collaborations among Comca’ac community members and with Mexican scientists, resource managers and other external actors are essential to achieve biocultural conservation.
◊ Leadership development using biocultural and cross-cultural approaches will strengthen Comca’ac capacity for protection of their territory and for solving complex problems such as climate change.
◊ Sustainable economic alternatives will lead to long-term conservation of Comca’ac homelands.
◊ The collection, accessibility, diffusion, exchange and application of accurate information increase understanding of the value of traditional knowledge and scientific approaches towards solving complex problems in conservation and sustainable livelihoods.

Program Goals

1. Foster more equitable and effective collaborations among Comca’ac community members and with scientists, students, resource managers and other external actors.
2. Enrich the educational environment, perspectives and activities of Prescott College students and faculty, resident fellows and other researchers through exchanges with Comca’ac elders and youth.
3. Develop and implement a biocultural field school organized around four overlapping themes:
   a. Leadership
   b. Natural resource stewardship
   c. Language, culture and traditional knowledge
   d. Social and ecological health
4. Strengthen exchange of traditional and scientific knowledge within the Comca’ac community and with scientists and conservation leaders.
5. Increase options for livelihoods in conservation and other sustainable enterprises with Comca’ac individuals and groups.
6. Increase information and knowledge compilation and diffusion on biocultural learning and practice.

Results

Over 40 young Comca’ac and elder teachers regularly engaged in Prescott College classes, Kino Bay Center programs and in leading Comca’ac community initiatives. The wide range of topics and activities addressed include critical habitats and important cultural/ ecological species, climate change, indigenous rights and self-governance, sustainable development, art, language and culture. These young and older Comca’ac together are solving problems and sharing widely their learning around biocultural heritage and conservation practices.
1. More equitable and effective collaborations with Comca’ac and external actors.
   - Regular consultation with Comca’ac leaders and authorities to identify priority concerns, develop and evaluate program directions and outcomes.
   - *Guidelines for Equitable Collaborations, Ethics and Best Practices Between Institutions and Indigenous communities* document produced in collaboration with Comca’ac leaders.
   - Education on indigenous community issues and rights ongoing with outside groups, researchers and students.
   - Bridges fostered between Comca’ac and government, networks and institutions.

2. Enriched educational environment, perspectives and activities of Prescott College students and faculty, resident fellows and other researchers through exchanges with Comca’ac elders and youth.
   - A total of 20 Comca’ac youth and elders participated in Prescott College field courses with the following classes: Marine Conservation (Fall 2015), Marine Biology (Spring 2016), Methods in Plant Ecology (Spring 2016).
   - A two-week class with 8 Comca’ac and Prescott College students on how to obtain RAMSAR designation for protection of estuaries and fisheries. (10/15)
   - The Comca’ac and Prescott helped lead a workshop at the Next Generation conference on the effectiveness of Ramsar sites as a community-based conservation tool.
   - A climate change teach-in between Prescott students and Comca’ac students transformed the way both groups understood the causes and real impacts of climate change. (10/15)
   - Four Comca’ac participated in the Wetlands Week event that celebrated the Laguna de la Cruz estuary Ramsar site. They provided information on the Comca’ac occupation era and heritage in Laguna de la Cruz.
   - One Comca’ac student internship with the Environmental Education Program during Wetlands Week. (10/15)
   - One Comca’ac representative is participating with the Laguna de la Cruz Technical Committee.
   - Comca’ac Ecology Club, *Zaah Copxot*, participated in the regional network meeting (7/16). Comca’ac club activities include a nopal/ prickly pear cactus garden, learning medicinal plant uses, waterbird monitoring and nest protection, and kayaking.
   - A knowledge exchange on sustainable development took place between 18 doctoral students from Universidad Autonoma Metropolitana and 12 Comca’ac participants working in arts and crafts, fisheries, eco-tourism, and hunting. (5/16)

3. Growing Comca’ac leadership capacity for protection of biocultural diversity, critical habitats and for solving complex conservation problems in their territory and in the region.

Comca’ac students and leaders represented their perspectives and priorities in regional and national trainings, seminars and conferences:

- *Patrimonio Biocultural Northwest Mexico* (October 2015). Organizational meeting to initiate CONACYT node of the National Network to document and disseminate Mexico’s biocultural heritage foster partnerships with indigenous communities, academic and other institutions.
- *Conferencia de Etnobiologia Colombia* (October 2016). Working group to write the Latin America and Mexico Society for Ethnobiology Code of Ethics.
Defenders of Territory Group- Grupo Defensores del Territorio

- Mining initiative in Comcaac territory halted in March 2016.
- The Comca’ac community voted and won a referendum for more effective and transparent governing authorities in May of 2016.

Comca’ac Defense of Territory Group, led by Gabriela Molina and Kino Bay Center intern Leonel Hoeffer, with a core group of 5 young Comca’ac organized to protect their territory against mining and other mega development projects and to promote more effective and transparent governance by Comca’ac authorities. They accomplish their goals through alliances with national and international networks, careful background investigation and research, holding press conferences and through social media. They organized internally, holding community meetings to provide information on the negative effects of mining and other mega development projects and the community’s right to free prior, informed consent and transparent governance. Meetings were attended by over 60 people.

https://www.youtube.com/watch?v=Ot3Hr1e46-Y

4. Fostering the protection of critical species and habitats
   - **Estuaries & Fisheries Monitoring**: A group of 8 members led by Aron Barnett from Punta Chueca are supported to conduct monthly monitoring of crab and scallop fisheries. Technical assistance is from Miguel Angel Cisneros of CONAPESCA and Alberto Mellado of CONANP.
     - Trainings and certification by PROFEPA (February 2016) and CONAPESCA of 8 Comca’ac young leaders for monitoring and protection of fisheries and estuaries in the Infiernillo Channel.
     - A decision to halt intensive net technology for crab fisheries made by Comca’ac cooperatives after informational meetings with the Fisheries Monitoring Group.
   - **Medicinal Plant Conservation Groups**: This group is protecting critical habitat and priority species while also increasing community use of medicinal herbs, teas and traditional foods. Sixteen Comca’ac leaders in Punta Chueca and Desemboque are led by Claudia Lopez, Vilma Morales and Hilda Astorga with Laura Monti.
     - Bi-monthly medicinal sustainable collection field trips with monitoring of culturally and ecologically important plants in mangrove and ironwood habitat.
     - Survival foods and emergency medicinal plants being documented for disaster contingency planning in conjunction with the CONANP program on climate change adaptation.
     - Three day training on ironwood and mangrove conservation methods led by Laura Monti and Gary Nabhan in Ben Wilder’s Next-Generation Ecology course and in Prescott College’s Ecology Methods course with Lisa Floyd-Hanna and Laura Monti.

Romelia Barnett Claudia Lopez Adriana Barnett
- **Bird Monitoring Group:** This group increased their capacity and outreach efforts with six new participants led by Gabriela Barnett with Prescott Fellow Lindsay Adrean.
  - Monthly waterbird monitoring in the Santa Rosa Estuary which is located in Comca’ac territory, which led to increased leadership capacity, data management skills and species identification.
  - Nesting habitat protection in Punta Chueca implemented by informational signage in Spanish and Comca’ac language, created with assistance from a Comca’ac linguist, Rene Montano. Young interns presented traditional songs and stories on birds taught by elder Oralia Morales Ortega.

- **Grupo Tortuguero Comca’ac:** This group renewed their efforts for sea turtle conservation with new members, strengthened partnerships with Grupo Tortuguero del Golfo de California and CONANP.
  - Two sea turtle protection and monitoring activities and two regional collaboration supported in Punta Chueca and Desemboque each involving 20 participants.

5. **Increased application of Comca’ac knowledge of the cultural and ecological landscape within modern resource management constructs and in the protection of their territory.**

- **Biocultural Learning Advisory Group:** This group is informing the development of workshops and courses that support Comca’ac priorities. The group is led by Laura Monti, Elisa Romero, Rene Montano with Claudia Lopez, Romelia Barnett, Vilma Morales, Mayra Astorga. External advisors Diana Luque, Ben Wilder, Alberto Mellado (Cmiiquee), Alberto Burquez, Global Diversity Fund, Octaviana Trujillo, and Anabela Carlon.
  - Learning modules and curricula in development: Comca’ac heritage knowledge, Western knowledge systems, biocultural heritage with history, geography and mapping of Comca’ac territory including wetlands of the Infernillo Channel, traditional navigation, medicinal plant uses and conservation, ironwood conservation, sea turtle conservation protocols with songs and story-based video production.
  - Language and culture is woven throughout all modules and activities. Comca’ac elders advise and teach on all elements of the ICP program.
  - Two participatory video workshops supported with 15 Yaqui and Comca’ac who produced a video documenting issues of protection of territory and climate change.
    - [https://www.youtube.com/watch?v=cOtZ-FGrrE](https://www.youtube.com/watch?v=cOtZ-FGrrE)
6. **Social and Ecological Health**

- **Kayak Group Hacat:** This group is expanding with new participants and is working to increase knowledge and skills in adventure kayaking and traditional navigation while also having fun. The 12 participant group is led by Valentina Barnett and facilitated by Laura Monti with instructors Larry Goldstein with Martin Ziebel.
  - Instructors led a 3-day kayak course that taught 12 Comca’ac resulting in increased knowledge and skills in adventure kayaking. The course included an overnight camp on Tiburon Island. (May 2016)
  - Deepened understanding of their biocultural heritage in the Gulf of California achieved through teachings, songs and stories of Comca’ac navigation with Rene Montano teaching star navigation and Lorenzo Herrera describing historic Comca’ac camps on the Baja Coast.
  - Regular kayak outings increasing physical fitness while allowing youth to explore estuaries, marine and coastal habitats.

- **Climate Change Preparedness Initiative:** This initiative developed new partnerships and increased community adaptation capacity. Comca’ac leaders Saul Molina, Romelia Barnett, and Mayra Astorga worked in collaboration with CONANP.
  - Over 40 community members coordinated a complete restoration for 30 houses in Desemboque as part of recovery efforts from Hurrican Odile. The effort was coordinated by Saul Molina, Mike Grey and Laura Monti with a grant of $25,000 from the Silicon Valley Community Foundation.
  - ICP coordination and collaboration with CONANP leveraged engagement with over 10 government agencies in a capacity building program for women organizing contingency plans to respond to climate related disasters.
  - Prescott College student, Lauren Twohig, produced a video on climate change with help from Comca’ac, providing first hand accounts of the impacts of climate change on their lives. Lauren also created an informational display on the topic for community education purposes.

7. **More options for livelihoods in conservation and other sustainable enterprises generated.**

- Paid Internships and stipends for Comca’ac students and interns, capacity-building activities increased skills and generated opportunities for youth for paid employment.
- Leaders and interns achieved success in procuring additional funds for conservation and livelihood initiatives.
- Conservation leaders were contracted to lead outside research endeavors in their territory, which provided financial support for Comca’ac individuals and groups.
- A sea salt enterprise was initiated with a partnership between Comca’ac groups and Lush Cosmetics, an international company that adheres to ethical buying practices. After months of planning, in June of 2016, an agreement was reached to provide funding to pilot salt collection at a small scale and to develop a business plan. The partnership will enable a Comca’ac cooperative to take shape and sell sea salt, thus providing employment for up to 40 individuals.
8. Generating and disseminating knowledge and practice of biodiversity

ICP Publications, Papers


- Red de Nodos de Aprendisaje y Formacion Biocultural Comunitarias del Desierto Sonorense y el Golfo de California. Laura Monti Contributed paper. CONACYT’s Biocultural Heritage Northern Mexico Network meeting, Noviembre 2015.


Ben Adad Comito, Salma Morales - Marine Conservation Class Fall ‘15