

CMP - CCNet Conservation Case Study Template

Case Study Title: Think to learn, learn to know, know to adapt, adapt to win

Authors: Paloma Bravo Córdova – Chilean National Forest Corporation (CONAF)

Contact Person: paloma.bravo@conaf.cl

Location: La Campana National Park

Summary:

- The Chilean Wine Palm is a unique, native, endemic, relictual, and Vulnerable species. This iconic species of the Mediterranean forests of Chile is in a critical state. A slow-growing species, it reaches maturity at around age 80 - 90 when it starts producing seeds for the first time.
- Since 2017, the Chilean Wine Palm was defined as a conservation target for La Campana National Park. This marked a turning point in its conservation management.
- To date (2020), we have established agreements with the local community, updated the species conservation plan, and collected the first baseline data of its key ecological attribute: Natural regeneration for monitoring. This enabled the reclassification of the species as “Endangered” (EN).

Public Overview (Web Post) of Case Study: <https://bit.ly/3e4Qlgp>

Setting the Scene:

The Chilean Wine Palm (*Jubaea chilensis*), the southernmost palm tree in the world, is an endemic species to Chile. It is the species of greatest scientific value of the Chilean flora and its current conservation status is critical. It is estimated that, in the last 500 years, the number of individuals of Chilean wine palm has decreased by around 98%, from five million individuals to just 121,284 (Díaz, Op. Cit.; González et al., 2017). The largest population of this palm tree is found in La Campana National Park, with around 60,000 individuals located in an extensive palm grove in the heart of the park.

Since ancient times, this species has been a source of livelihoods for humans, through the provision of food, shelter, housing materials, and opportunities for leisure and recreation. This palm has been overexploited through tapping to extract its sap and produce “palm honey”, which led to its extinction in several locations. It was not until 1941 that this practice was regulated, but by then the status of the species was already precarious. Despite this, its exploitation continued, not for its sap but its seeds of high nutritional content and highly demanded by local and Asian markets.

After the Chilean Wine Palm was selected as conservation target for La Campana National Park in 2016, we were able to identify the direct threats that affect this species, as well as their contributing factors. Moreover, we were able to link the development of strategies to a new way of performing monitoring, which provided us with answers to specific questions we had set during the planning process developed since 2016-2017.

La Campana National Park is 52 years old and was created for the protection of the palm groves that grow in the area. Its declaration was traumatic for the local population, mainly peasants, who used to

work in the agricultural lands that would later become the national park, mainly in livestock rearing and sap tapping to produce “palm honey”.

Ever since its designation, the park and park rangers had had to deal with protection, conservation, and agreements with local communities, many of which used to live within the park boundaries and were progressively removed from the area. But traditional land uses of an area do not disappear when it is designated as a national park; rather, they are inherited, generation after generation, along with legitimate demands from citizens for the use of the space.

The adoption of the Open Standards for Conservation and the selection of the Chilean Wine Palm as a conservation target perfectly met the park’s management needs:

- **Status of the palm grove:** The palm grove was in grave condition. There used to be a tradition of “management agreements” for harvesting the palm seeds within the park, but it became abandoned. Moreover, lack of capacity for surveillance enabled the establishment of illegal harvesting camps.
- **Asian market:** Entry into the Asian market between 2015 and 2016 resulted in an increase in the demand for Chilean Wine Palm seeds; exports went from 1,480 kg of seeds in 2015 to 117,882 kg in 2016, mainly harvested within the national park. This led to an increase in seed price per kilogram from USD 1 in 2016 to USD 10 in 2016 [sic] which, paired with the park rangers’ lack of capacity for surveillance and control, resulted in massive exploitation of the palm grove.
- **Estrangement between advisory council and park rangers:** The relationship between the park and the local community had always been unfriendly, with some exceptions like the establishment of management agreements for the harvesting of palm seeds. However, because of the little respect for the species shown in recent years, the relationship was in a structural estrangement, accumulating years of discontent between the two sides.
- **Actions without traceability:** Although park rangers were aware of the direct threats and contributing factors, they were not aware of the correlation between them; therefore, there was no information to track each action performed. Activities in the park occurred in a haphazard way, without a clear link to the protection of a specific ecosystem and were generally commissioned by some higher or central level.
- **Discontent among park rangers:** The team of park rangers spent most of their time assisting visitors and performing public use management tasks, such as cutting entry tickets, clean up, and rescuing lost visitors. The vague link between the functions they performed with the conservation of biodiversity led to their disappointment and discontent.
- **Inefficient and poor monitoring:** The National Park had always been a source of data, e.g., through inventories and establishing plots; however, data collected was rarely used in decision-making or adaptation of management. In general, activities were geared towards meeting institutional goals established by the central level, with no connection to the conservation objectives.

Results and Lessons Learned:

First outcomes are readily visible and are related to a renewed motivation of park rangers in the management of the area and the recognition given to the Chilean Wine Palm following its selection as conservation target; therefore, we focus our adaptive management on this target. In fact, this flagship

or emblematic conservation target, which is affected by most of the direct threats in the area, is the basis for the development of 11 of the 14 strategies identified to address those threats. It is also a charismatic species that provides identity, not only to the park, but also to the local community and the whole country.

1. Result

Advisory council recommends banning the harvest of palm seeds

Following a long period of estrangement between the local community and park rangers, during the formulation of the management plan the gap begins to close. The relationship improved so much that it was possible to reach an agreement with the community who used to harvest seeds from the park for commercial purposes and establish the first official ban on the extraction of palm seeds. In this way we started targeting the direct threat “Extraction of biological forest resources”.

Lesson learned

Although most of the neighbors represented in the advisory council agreed with this measure, there are some dissenting groups who do not comply with the agreement because they, legitimately, see the harvesting of seeds as part of their culture and cultural heritage. Given this situation, the ban was successful, but a small number of specific groups continued harvesting seeds, with whom we need to establish a different type of agreement.

2. Result (THINK TO LEARN)

First request for the reclassification of the conservation status of the species (2017)

One of the first strategies we began implementing the first year was “Strengthening of legislation” and “Scientific and applied research”. Accordingly, the first action we developed was to start working towards the reclassification of the palm, which was classified as “**Vulnerable (VU)**” since 2008. However, we could not reach our goal because the committee rejected our first request due to lack of sufficient background information and scientific evidence.

Lesson learned

This rejection was a hard hit for the team but was the perfect opportunity to apply an adaptive management approach: Get together, find out where we had failed, and adapt the course of action. We had a year to prepare and we did.

3. Result (LEARN TO KNOW)

Setting up the first monitoring system for the key ecological attribute “Natural regeneration” (2017)

After analyzing the outcome we had before the Species Classification Committee, and contrasting it with our management plan and the need for monitoring the key ecological attribute of the species (natural regeneration), at the end of 2017 we made an effort to establish the first preliminary sampling design to monitor regeneration. This meant the installation of 30 plots within the park, which was developed entirely by Park Rangers and CONAF technicians.

Lesson learned

The main lessons we drew from those strenuous days of field work stemmed from the reconnection of park rangers with the territory. The experience and “the eye” of each park ranger were crucial for the

collection of data. Furthermore, we were able to assess quantitatively and objectively the costs and minimum requirement for carrying out this work, information we did not have until that moment. Today we are fully developing a methodology that will allow us to expand and correctly establish a monitoring system, with a total of 114 plots to measure the natural regeneration of the palm.

4. Result (KNOW TO ADAPT)

Scientific publication of the first monitoring findings

The findings of this first monitoring effort were the basis for a new attempt to reclassify the palm under the “Endangered (EN)” category, but we had to tell the story. For this purpose, we wrote a paper among those who participated in the process, which was published in [CONAF’s] bulletin of conservation and management of natural protected areas in November 2018.

Lesson learned

A key lesson learned was the importance of being able to effectively communicate the results of conservation and monitoring efforts, the development of a strategy, the achievement of objectives, etc. Being able to communicate this to the local community, neighbors, the scientific community, and other stakeholders is crucial to ensure ongoing conservation management.

5. Result

Second request for reclassification of the species, with published data on natural regeneration (2018)

With the new data we had obtained and published, we rewrote the proposal. We supplemented this information with new data supplied by other monitoring elements already in place in the national park. An important contribution was the data provided by a *NDVI* analysis carried out using google engine which enabled us to quantify the magnitude of the threat "land use change", a threat identified in the conservation plan that we were simultaneously updating through the application of the Open Standards, in the year 2018. Unfortunately, due to a decision made by the executive level of CONAF, the new fact sheet was not submitted; hence, we failed our second attempt to reclassify the species.

Lesson learned

With this new defeat, after the extensive work we had done, our team met again. Our main lesson was that we had ignored internal stakeholders, and that the story had to be communicated in all directions and to all key stakeholders identified in the stakeholder mapping/analysis, core planning team, support team, and extended team.

6. Result (ADAPT TO WIN)

Third request for reclassification of the species, submitted jointly with key stakeholders (NGO *Centro Ecosocial Latinoamericano*)

At this point, we had developed extensive experience, which allowed us to adapt and seek other ways to achieve our goal, which had always been to change the conservation category of the species. After telling the story internally, communicating with our own decision makers and securing institutional support, we reached out to our strategic partners in the territory. We shared the file we had assembled, based on three years of data collected by us and the park rangers, with the NGO *Centro Ecosocial Latinoamericano* and asked them to join us in our efforts to request and start the process for the

recategorization of the species. After a year and numerous interventions, at present we can finally say that we have succeeded in changing the category of the species, which is a great step towards its conservation, the first step of many more to follow.

Today, the Chilean wine palm has a new conservation category. After 12 years, it has been classified as Endangered and we have been able to show through our work, which started with the definition of a conservation target, the actual conservation status of this species.

Other results:

- First livestock cadaster for the National Park
- Conservation plan for the palm following the Open Standards for the Practice of Conservation
- Start procedures to list the species under CITES to regulate its trade
- Strengthening of the advisory council and new participants

Application beyond Case:

This experience could be replicated in any other protected area; flagship or charismatic species are important to leverage management and can become the main engine of management.

Further Information:

- Management Plan for La Campana National Park: <https://bit.ly/2AqpQcG>
- Conservation Plan for the Chilean wine palm: <https://bit.ly/2D2vMJP>
- Species reclassification sheet 2017: <https://bit.ly/2BZXYN4>
- Species reclassification sheet 2018 -2019: <https://bit.ly/3dZ7v4m>
- Video on monitoring : <https://www.youtube.com/watch?v=FsZAAU7-250&t=31s>
- Video Management Plan : <https://www.youtube.com/watch?v=uYwhjQI4Fbs>
- Minutes regarding reclassification of palm 2019: <https://bit.ly/2C16fAk>

Key Words: Copy the following table and tick the themes that apply to your case study. This is not meant to be a restrictive list - case studies that range beyond these themes are most welcome! This table does not count against your 3-4-page limit.

Key Words (<i>select all that are relevant</i>)	Put x if Relevant
Stages in Conservation Standards Cycle	
- Assess	X
- Plan	X
- Implement	X
- Analyze & Adapt	X
- Share	X
- Full cycle adaptive management	X
- Other	
Case Study Scale	
- Project-level	X
- Program-level	
- Organizational-level	
- Other: SPECIES	X
Specific Topics Addressed:	
- Human wellbeing	
- Climate change	X
- Community-based conservation	X
- Indigenous populations	
- Marine conservation	
- Freshwater conservation	
- Terrestrial conservation	X
- Other: SPECIES	X