

Ecosystem Restoration Camps Designer's Manual

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Introduction:

The first Ecosystem Restoration Camp in the Altiplano area of Spain, came into being with tremendous but perhaps haphazard enthusiasm from all over the world. The idea of such an initiative had incredible appeal, but no real roadmap. As a result progress took place very slowly, through long discussions and plenty of trial and error.

During the California Restoration Camps Council in Paicines in spring 2019 I witnessed the same sorts of conversations taking place amongst those developing restoration camps in California. There was a need, I thought, to share with those in California the lessons learned from those in Spain.

The framework in this Ecosystem Restoration Camps Designer's Manual was constructed out of interviews with long term team members of the Spanish Ecosystem Restoration Camp. At its essence it answers the question, 'if we could go back in time and speak to ourselves at the beginning of this project, what would be the map we would provide?' It provides a chronological step by step series of insights and questions to ask in order to develop an Ecosystem Restoration Camp from scratch. I want to thank Rachel Robson, Ides Parmentier, Jo Denham, Kirsten Van Reisen, Frances Osborn and Levien Van Zon for your incredible insights and reflections. Thank you Robin Dirks for editing suggestions and thanks to Della Duncan for additional inspiration on organizational development. Also thanks to Cameron Weber and Ian Daitz for your insights on niches. The original report that this Designers Manual is based on was published in the August 2019 edition of Permaculture Design Magazine.

One additional note: Ecosystem Restoration Camps is an ongoing experiment. This Designer's Manual is based on the experience of one group of people in one camp. Each camp presents a unique context and requires independent inquiry. Every camp will be different in how it operates and there isn't a one size fits all approach. Nonetheless, this manual is based on people with first hand experience. The patterns that emerged may not be entirely universal but will definitely give you clarity.

Kindly, Robin Woolner

1. Vision, Planning and Roles

This section describes the early formation of the project. It outlines the steps to conceive and structure a camp.

a. The call:

It all starts with an individual or group calling out to the world their cause. When it is the right call it speaks to a strong need in the world and draws the right people to it. Magnetism.

- Write what it is you are calling for:
 - Share it with friends
 - Publish it online or in print
 - Make a website
- An example:
 - John Liu made the call for the Ecosystem Restoration Camps model:

Restoring the Earth needs to become the central intention of human civilization. In order for this to happen millions and tens of millions of people must be aware that it is possible to restore the Earth and be able to do it. This will lead to meaningful work for

every human being on the Earth and end the concept of unemployment. It will begin to be realized that real wealth for humanity is not the accumulation of material possessions. Real wealth exists in ensuring that all can live in dignity and with their inalienable sovereign rights.

The Ecosystem Restoration Camps Foundation has been conceived to create the conditions that will allow people of all walks of life and from all over the world to live and work together to change the course of human history and restore the natural ecological functions on the Earth. They will do this by simply restoring ecosystems where the camps are invited to work and by continuous training of those who choose to learn how to do this. ([ERC Facebook Post](#))

b. Team Formation:

A team will form out of those who respond to the call:

- Who are the people on the team? What capacities do they bring? What kind of time commitment/responsibility are they agreeing to?
- Who else with which skills would the team benefit from?
 - [See 1.g. \(Roles and responsibilities\)](#)
- How will you as a team connect, build trust, speak authentically and care for one another from the onset?

c. Outreach:

Connecting with stakeholders and nearby community members provides for a deeper understanding of the context of the camp and opens up for opportunities.

- Who are the stakeholders the project is (or aspires to be) connected to?
 - Get in communication with them ASAP. Keep the conversation going.
- What are they doing? How can you support them? How can they support you?

d. An organizational and legal structure:

Once there is a team it is important to be intentional with how the team will work together.

- How will decisions be made?
- When will meetings take place?
- What will the conflict resolution process look like?
- Develop a team agreement on 'norms' or 'Ways of Working.'

- How to ensure that everyone working together is being provided the care and support they need individually?
- What working groups are required?
 - How to minimize siloing of information in between working groups?
 - What are the decision making thresholds between working groups?
- What are the agreements around meeting times?
- What are the agreements around communication technology to be used?
- What sort of legal structure is required?
 - Will you need a board of directors? If so make sure a percentage are regionally local to your project.

e. Develop a plan:

Developing a plan together helps everyone get on the same page- a common mental model.

- What is your vision, mission and strategic plan to get you there?
- How to evaluate progress, learn and pivot as needed?
 - Stay in conversation
 - Learn, grow and reflect together

f. Financial structure:

Having a financial plan allows for a clear understanding of the capacity of the project.

- How will the project make money and accumulate resources?
- How will the project spend money and use resources?
- Does the financial plan balance with the strategic plan of the project?
- What percent of the project's resources should go to income generation?

g. Roles and responsibilities:

This is an overview of the various responsibilities with running a camp.

- Project coordinator
 - Tracks the big picture (the overall strategic plan) and how the subprojects are coming along and fit together.
 - Brings other coordinators together for 'long term planning meetings.'
 - Facilitate conversations around resource allocation
 - Finance
 - Volunteers
 - Tools/Vehicles
- Communication strategy coordinator
 - Narrates what's happening to supporters
 - Integrates communication with regional and international communication strategy
- Stakeholder outreach coordinator

- Builds relationships with the individuals and organizations who share common goals and values.
 - Builds relationships with nearby community members, governments and businesses
- Bookkeeping
 - Keep track of expenses
- Building and Site infrastructure coordinator
 - Build and upkeep site infrastructure
- Restoration plan coordinator
 - Coordinates and restoration plan
- Evaluation strategy coordinator
 - Develops and measures to evaluation protocols
- Volunteer recruitment coordinator
 - Responds to volunteer applicants
 - Gets updates on the skills required from other coordinator and finds best possible matches
 - Screens volunteers for unsavory characters
 - Provides transportation information or arranges for pick-ups and drop offs
- Volunteer hosting coordinator
 - Welcomes new volunteers and provides orientation
 - Provides cordial departures
 - Facilitates educational and social programming
 - Coordinates weekly cleaning activities
 - Facilitate 'buddy' system between volunteers and long term residents
- Health, safety and first aid coordinator
 - Is trained in first response
 - Makes sure first aid kits are fully stocked and close by
- Food and kitchen coordinator
 - Manages inventory
 - Replenishes stocks
 - Coordinates cooking and cleaning of kitchen
- Farm/Garden coordinator (not recommended at beginning of project if financially possible)
 - Manages farm and garden

2. Camp Infrastructure

Ecosystem Restoration Camps seeks to forge the way for symbiotic relationships between humans and their surrounding ecologies. In doing so the camps should develop a design which

synchronously provides for the needs of humans and the surrounding natural systems. Even if the camp is mobile, the positive feedback between people and landscape is a critical consideration

a. Provide for human needs:

- The basic design considerations:
 - Food
 - Shelter
 - Sanitation
 - Waste
 - Transportation
- Are you working with a local community which can provide for most of their own needs?
- Is there a need for mobility in your project?
 - How big is the region you plan to work on?
 - If yes, how to include that consideration when designing for food, shelter, sanitation, waste and transportation?
- Ecological impact of infrastructure:
 - What are the traditional architecture/building methods of your region?
 - Are there natural builders near by you could consult?
- Budget
 - What is the infrastructure budget and how to use it most wisely?
- Prioritization:
 - Once there is an income stream, what is the project prioritization sequence and timeline?
 - What criteria is the prioritization based on?
 - Need?
 - Cost?
 - Construction time?
 - Resource availability?

3.Ecosystem Restoration Plan

Ecosystem restoration camps are emergent spaces with diverse content and context. I view Restoration Camps as laboratories where complex experiments are taking place. These guiding insights and questions are by no means complete. Overall I see a need for a diversity of strategies and shared learning. The plan should satisfy the needs of the stakeholders including humans and should be the result of dialogue (and cross checked) with numerous experts.

a. What do you observe in the landscape:

Take lots of time to observe, research and understand your landscape.

- Moisture
- Airflow
- Light
- Temperature
- Geology
- Esthetic
- Plant communities
- Animal communities
- Insect Communities
- Soil Communities
- Human interactions

b. Stakeholder analysis:

By stakeholders I refer (mostly) to the non-human members of an ecosystem. Learn what their needs and concerns might be and who they work most closely with. The stakeholder analysis will help illuminate which niches are present, absent or in need.

- Who are the plants, animals, insects and soil life who are present?
 - How do they shape their landscape and in what way does it define their relationships with their neighbors?
 - What are their needs?
 - How to maintain those needs in a design?
 - This is a question of NICHES.
 - Is there unhealthy niche dominance being expressed?
- Who are the plants, animals, insects and soil life who are NOT present but whose presence would support ecological function?
 - How will their presence impact current stakeholders?
 - What are their needs?
 - How to integrate those needs into niche designs?
 - How to harmoniously integrate new niches into a landscape in a way that supports current stakeholders?
 - Which are the Keystone species the ecological system will (has) climax(ed) towards?
 - How does the design allow for succession in that direction?
- What are the human needs of the landscape?
 - How might the design provide for humans to meet their needs from the landscape regeneratively?
 - If there are unhealthy feedback loops in the ecological system resulting in excesses of particular species, how might species excess be mitigated through human utility?

c. Develop a vision which describes success:

Like the vision and mission of the organization, a clear description of the success of an ecosystem intervention will help clarify the intention and will support an evaluation process later on.

- What are its features?
- What are the emerging relationships?
- Draw a picture of it!

d. When developing a restoration plan, consider these actions:

These are tools common to ecosystem restoration initiatives.

- Earth works for improved hydrological function
 - For arid mountain scapes: Swales, Gabions, Dry stone walls, Ponds, Dams, Etc
 - For de-channelizing streambanks and induced meandering: Vanes, Picket Baffles, Boulder Baffles, One-Rock Dame, Wicker-Weirs, Rock-Arch Dams, removing domestic livestock, Etc.
- For Soil function
 - For aeration: Deep ripping, Keyline ploughing, cover cropping, etc.
 - For Soil nutrient cycling: Compost and compost tea, managed grazing, mulching, cover cropping, etc.
- For Plant Communities
 - Identify a planting plan
 - Which plants should be included in a plan?
 - Companion planting?
 - How might succession be represented in the plan?
 - Where and how to access genetic material?
 - If starting your own nursery:
 - If wild harvesting this should be done with extreme precaution as the material in the wild provides diverse and important ecological functions. Check with local experts!
 - If buying from a native plant nursery/seed provider, check to make sure the genetic material is complimentary to your bioregion.
 - If buying from a native plant nursery:
 - check to make sure the genetic material is complimentary to your bioregion.
- For niche development:

- Planting vegetation
- Rock habitats
- Fallen tree habitats
- insect habitats
- Bird habitats
- Animal habitats
- For (“invasive”) species who are negatively affecting the resilience of the overall system
 - Considering different time scales (1 year, 5 years, 20 years, 50 years...), are you certain their impact is negative?
 - If yes, close the loop: Design so that their biomass is benefitting the system in its ‘removal’ process as much as possible. Be smart about this.
 - A material for humans
 - A soil amendment
 - A material for habitat
- Chances are humans are members of the degraded landscape you are part of. Make sure that the restoration plan includes locals and ways that they can have symbiotically regenerative interactions with their landscape
 - How will the local community experience and learn about the benefit of this plan?
 - How will they become inspired?
 - How will their livelihood needs be met?

e. Historical Violence:

If it is true that the land holds historical violence, part of the work of landscape restoration involves healing/releasing these historical events.

- What sort of significant historical events took place on your landscape?
- What is the underlying patterns behind these events?
- In what ways can these events be acknowledged and released?
 - My sense is that large gatherings and groups of humans celebrating are very positive for landscapes.
 - Integrating these practices into large, joyful gatherings might be useful:
 - See [world work](#)
 - See dance choreographers such as Michael Klein and Vitoria Kitsalou
 - Consult traditional peoples of your area

f. Integrate all of these considerations into a written landscape restoration plan:

When writing a restoration plan, consider including the following topics.

- A clear description of the current and historical context of the landscape and its relationship to humans including:
 - Natural History
 - Observation and further research on ecology
 - Stakeholder analysis
 - Social system analysis
- A description of the ecological challenges and the drivers of those challenges
- A strategy for how to solve those challenges
 - Ecosystem restoration strategy
 - Local community integration strategy
- A budget for the strategy
- A timeline for the strategy
- A definition of success
- A monitoring and evaluation framework

g. Monitoring Evaluation strategy:

Having an evaluation protocol is essential for learning. Be sure to institute this ahead of time so that there can be a baseline analysis to measure against the outcomes of the restoration strategy.

- Consider Following [this guide](#)
- I also highly recommend starting the project with principle based or developmental evaluation for building capacities in the team and organization.

4. Maturation

Once basic infrastructure is in place and plans have been developed, the project is ready to mature from planning and building into an operational restoration camp.

a. Operations might include:

- Hosting large cohorts of volunteers.
- Hosting events.
- Interorganizational collaboration.
- Diversifying income sources.
- Scaling up organizational restoration plan.

b. Organizational maturation and changing team members:

As an organization matures, new roles and responsibilities arise and old roles are no longer needed. Allow opportunities both for those who want to leave and those who want to join. It was interesting to see this in ERC Spain. At the point where most of the infrastructure was built, clear plans had been developed and there would soon be a stipend for team members, many team members decided their work was done and they were ready to hand it over.

- The team or individuals in one phase may not be the 'right' group for another phase of the organization.
- Consider that as an organization matures, it might require different people with different skill sets and interests.
 - For example, the pioneers who are drawn to the start-up phase of the project might not be best suited nor interested in operating within the mature organization.
 - Having a culture which trusts and embraces transitions is important for giving freedom to enter and exit the organization.
 - How to be egolessly passionate for the project?
 - How to honor the dedication of those who came before us in times of organizational transition?

Conclusion:

This Designer's Manual attempts to articulate the emerging patterns regarding ecosystem restoration initiatives. And, it is a working draft. It is the result of many conversations and hopefully many more to come. If you have been facilitating the development of an ecosystem restoration or landscape regeneration initiative I would like to interview you. Please contact me (Robin Woolner) at squidswillbsquids@gmail.com.