

PREPARED BY

Alexandra Paniagua Program Coordinator

INTRODUCTION



AstilleroVerde's reforestation program,
TreesForSeas, envisions healthy forest systems in the
Bellbird Biological Corridor of Costa Rica for an
integrated, sustainable future in which communities
and nature mutually thrive; mitigating the impacts of

functionality, and integrity for generations to come.

climate change to protect our planet's diversity,

TreesForSeas, is our tree planting program to make our shipbuilding efforts a regenerative pursuit. The major objectives of this program are:

plant and grow trees for carbon sequestration and timber replacement for the ships of <u>SAILCARGO INC</u>
 restore ecological function to degraded, deforested land, in the Bellbird Biological Corridor and Gulf of Nicoya region of Costa Rica, and

3) promote community resilience.

For this season our planting goal increased by 1,000 for a total of 4,000 trees. Our tree nursery Vivero Espavel successfully grew most of the trees for this season.

With these achievements TreesForSeas is putting down roots to become a major contributor to ecological restoration in the lowlands of the Bellbird Biological Corridor (BBC).

This report shows the summary of our TreesForSeas Season 3, and highlights the steps taken to make it all happen. The more detailed report with additional resources is available upon request.

REFORESTATION STRATEGY AND

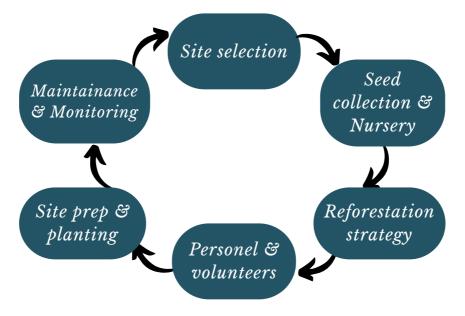
This year we focused on the most vulnerable areas of the BBC – the middle and the lowland sections (Piedrahíta, C. 2013) - due to climate change and socioeconomic conditions.

Forests are essential for mitigation. Costa Rica has <u>25 percent</u> of its territory set aside under some category management of the protected wild areas. However, what is not well known that 18 percent of the national forest territory is managed by ranchers and secondary forest along with isolated trees from farms sequester almost 70 percent of the country's total carbon dioxide emissions.

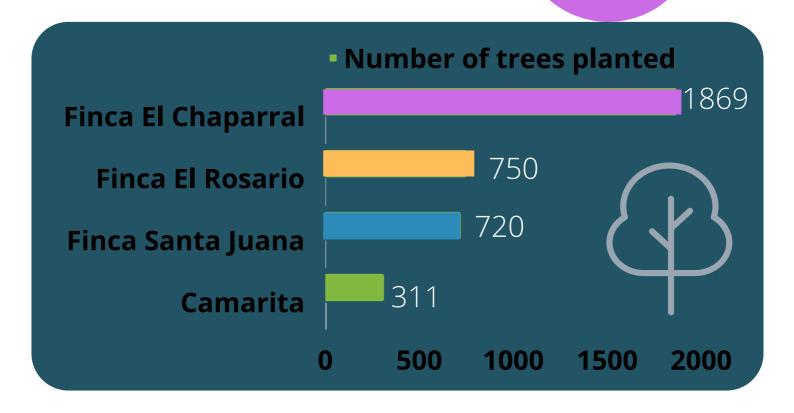
Our strategy was directed at working with farmers in the cattle sector, where livestock are responsible for about 23 percent of the country's gross greenhouse gas emissions. In that regard, livestock is a significant contributor to climate change. However, Costa Rican livestock production has a huge potential to capture more carbon dioxide than it emits.

TreesForSeas is strategically working with farmers who are interested in transforming their farms into a regenerative systems that contribute to the National Low Carbon Livestock Strategy (NAMA Program). With these goals in mind we are increasing biodiversity in farms located within the Bellbird Biological Corridor.

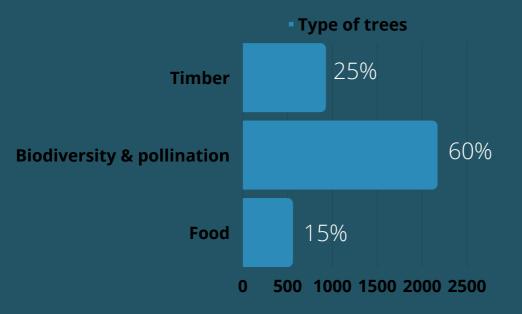
In order for reforestation to be achieved, we followed the following process:

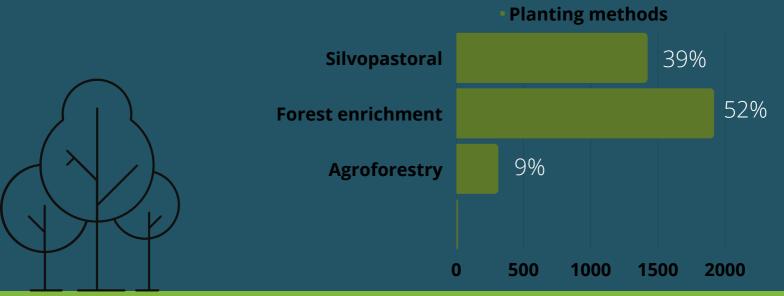






DISTRIBUTION OF TREES





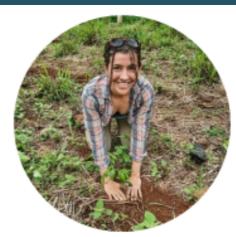
We planted 3650 native trees of 54 different species in four (4) different sites within the Bellbird Biological Corridor. Most of the trees came from our tree nursery *Vivero Espavel*. Within the *biodiversity and pollination* category most of the species planted were Cortez Amarillo (Tabebuia ochracea), Amyris (Amyris balsimera), and Cortez morado (Tabebuia impetiginosa). As *timber* majority of species were Roble Sabana (Tabebuia rosea), Cenízaro (Samanea saman), and Ronron (Astroniun graveolens). As *food* most of fruit trees were Cas (Psidium friedrichsthalianum), Cítrics (Citrus), and Guavas (Psidium guajava).

In the *silvopastoral system*, we planted trees as living fences, using a multilayered fencing technique with a combination of different multi-purpose species and fast-growing trees. Forest enrichment was done using naturally regenerating methods to increase the forest patches and biological corridor within a farm and also along a stream. Agroforestry was done for Camarita with terraces to cut aid planting and minimize erosion. We planted fruit trees and cacao trees under shade - this was the first step in converting this degraded land into an integrated farm system.

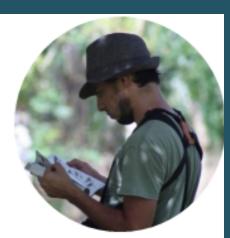
TEAM &VOLUNTEERS



Agroforestry Advisor Fabricio Camacho



Program Coordinator Alexandra Paniagua



Executive Director Alexander González



Fundraising Coordinator Aaron Hockman



Nursery Manager Lucas Ramírez



Reforestation Assistant Bryan Arias





Experience from our volunteer Vandeven Saberton

I worked with Astillero Verde for the course of one month and fell in love. Morning started bright and early, with breakfast at 6:30am and then a quick drive to our planting site. Although I had been traveling for a long time, I was finally able to meet local people intimately, working with them every day, getting to know them and practice Spanish. They were wonderful. Never had I met such genuine souls, coming together, united in the seemingly simple act of planting trees. Even with the physical labour and the heat of the Costa Rican days, there was a sense of accomplishment in what we were all doing. The people felt like they genuinely cared about this job and we all supported one another through the long days. It has been a while since I last worked with Astillero Verde, but these people still remain as a primary part of my memory. Beyond this, the environmental plan was explained to me simply and was abundantly clear it was very well thought through and deeply immeshed within the community. Coming from an environmental studies background, I was able to apply my knowledge and have a real sense of appreciation for the effort that goes into this organization. I am deeply grateful for this experience and to have met such wonderful people along the way.



PARTNERSHIPS

We continued and strengthened our partnership with ICE, Monteverde Institute, Plant-for-the-Planet. We have established new alliances with the local authority's partner Ministry of Agriculture and Livestock of Costa Rica (MAG) and local landowners. Thanks to the partnership, MAG connected us to two farms that are part of the National Appropriate Mitigation Action in the livestock sector, commonly known as NAMAs. These two new partner farms are El Gran Chaparral and Finca El Rosario.

In the framework of the United Nations Convention on Climate Change, a voluntary mechanism was created for countries to join global mitigation goals, according to their own technical abilities and capacities. Part of the strategies implemented by the NAMA program includes silvopastoral systems, live fences and scattered trees in paddocks.



















55 KIDS

from 6 years old to 12
years old, from sport team
Deportivo Sardinal de
Puntarenas. They planted
trees at Finca El Rosario in
Sardinal.

50 HIGH SCHOOL STUDENTS

from Liceo de Chomes. These activities were important to talk about the Bellbird Biological Corridor and its importance to their communities.



Trees For Seas



A huge thanks you to all who made it possible!

Our seasonal team:

Yomaira Espinoza Tenorio Brittany V. Venegas Perez Alejandro Morun Briceño Roberto García Varela Luis E. Espinoza Espinoza Gerardo Meléndez Marchena

Local and international's volunteers:

TA STORY OF THE

Vandeven Saberton
Sofien Phillip Ouakad
David Rosenberg
Dylan Davenport
Tara Maclaine
Mia Awe
Thomas Cogram
Karla Madrigal Delgado
Wendy Espinoza Tenorio
Didier Murillo Ramírez

Students and Staff from the farm's volunteers:

50 High school students from Liceo de

Chomes and their teacher Sara Castillo Reyes 50 Kids from Deportivo Sardinal de Puntarenas and their teacher Randall Arroyo Cruz 20 Kids from Escuela Flores del Sol Leonardo Martínez/Administrator of El Chaparral Rancho El Gran Chaparral staff Fabio González/ Owner of Finca El Rosario Finca El Rosario staff Finca Santa Juana staff

LEARN MORE ABOUT TREESFORSEAS

For more information about TreesForSeas, visit our <u>Website</u> and sign up for our monthly newsletter.

You can always contact us at <u>info@astilleroverde.org</u>.
Also be sure to follow @AstilleroVerde on <u>Facebook, Instagram</u>, and Linked in to stay up to date on our progress.