Newsletter

5th edition

Life Nieblas

@lifenieblas

Life+grancanaria

www.lifenieblas.com

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Contact at: gvierui@gesplan.es

i-FWC are starting to collect water on their field trial phase

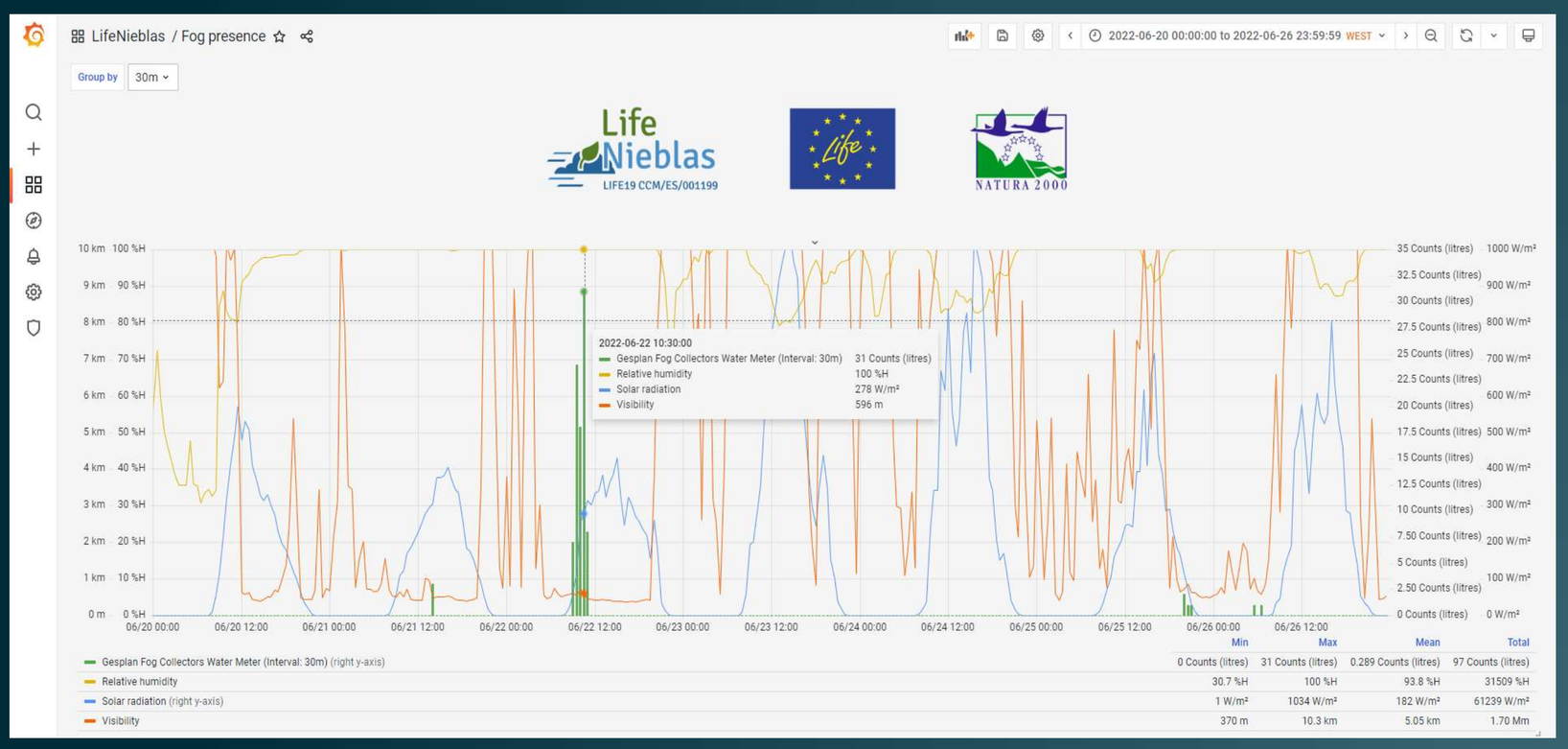
Innovative Fog Water Collectors have started collecting water during their field trials. These i-FWCs are meant to be smaller, lighter, easier to install and more importantly, cheaper than traditional FWCs.

During the first collection event since installed, i-FWCs have collected 90L. Comparing this figure against traditional collectors data, an efficiency improvement is suggested.

Below an example given during the days 16th – 20th Sep 2022 suggest certain efficiency differences:

It should be noted that early results will have to be confirmed in the long term.	16th-20th SEP 2022	
	FWC	i-FWC
Number of collectors	11	7
Impact surface per collector (m2)	8	0.63
Total water collected (L)	1050	90
l/m2	11.93	20.40

What is our weather station telling us about Life Nieblas?



The weather station celebrates one year since its installation at El Pinillo and a considerable database has been generated.

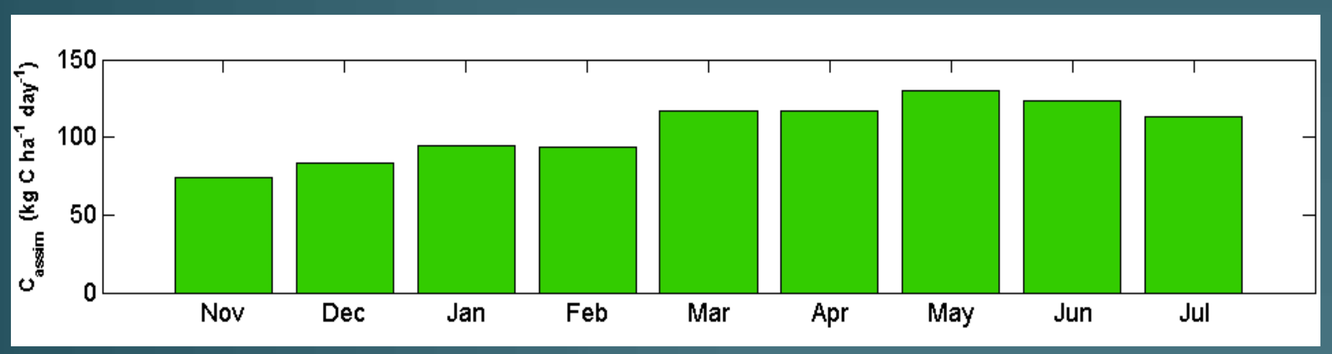
The effectiveness of the different reforestation systems is being tested through the use of moisture sensors connected to the weather station. One of the preliminary conclusions is that the use of individual fog collectors help improving soil moisture encouraging nutrient uptake by plants reforested under this method.

In turn, fog occurrence and its collection has been observed through data collected (i.e. 100% relative humidity, low visibility and low solar irradiance) as seen in the figure to the left. During the first year of data collection, 19,106L fog water have been collected. The maximum water collected in a day was 2,546L.

First results on carbon assimilation

Data analysis obtained from November 2021 to July 2022 (figure below) by the Eddy Covariance system installed at Cruz de Taborno forest, indicates that one hectare of Laurisilva is capable of assimilating on average 105.18 kg of CO2/day.

Extrapolating this value, an annual assimilation of approximately 38 tonnes of carbon per hectare is implied. Incorporating CO2 emissions to the atmosphere (due to vegetation's own respiration) into the analysis, will provide an estimate of the forest potential as a carbon sink.



Media coverage and project dissemination

Life Nieblas has gained popularity in the last few months not only within local and national media broadcast channels but also at international level. Below you can find some of the most relevant project's mentions:

The Guardian - https://www.theguardian.com/environment/2022/aug/26/fog-collectors-reforestation-trees-canary-islands-portugal-eu-aoe

Euronews - https://www.youtube.com/watch?v=nakQqlRDzXI&t=2s

CadenaSER - https://cadenaser.com/nacional/2022/09/16/el-proyecto-canario-que-obtiene-agua-de-la-niebla-para-zonas-calcinadas-hemos-recolectado-53000-litros-en-un-ano-cadena-ser/

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