

# Vora Riu Field Manual

A blueprint for regenerative olive farming

V1.1 – Jan 2026

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<https://vorariu.org>

# Introduction

# Our journey

When we bought our olive grove in 2023, we thought half of the trees would be dead in six months. We didn't trust ourselves very much.

It turns out it's simpler than it looks, and olive trees are extremely sturdy.

At this point, after two harvests, we thought it was a good moment to collect the methods and learnings following three years of regenerative agriculture practice.

We do not claim to be right. However, what we share here is based on hands-on practice and empirical evidence.

By sharing this openly we are trying to lower the entry barrier for others to acquire, own and manage olive groves, and also to keep learning from the conversations that may ensue.

# Workload as a design constraint

From the start, we set one non-negotiable rule: this should not become an enslaving project.

We designed the system assuming absence. Nothing critical should depend on our weekly presence, and nothing should break if we are away for two or three weeks.

This led us to favour spontaneous vegetation, perennial species and self-seeding mixes. Not as ideology but as a way to reduce long-term labour and fragility.

Our ambition is that, over time, the field requires less attention, not more.

A regenerative system that demands constant care is not resilient.

# Our principles

We are inspired by Permaculture, but do not aim to be ultra-orthodox about it or to be too restricted in our exploration.

Our guiding principles are the following:

**Try to work with what you have, avoid unnecessary inputs.**

Connect with your surroundings, know the people that surround you and what they know or have that may help you.

Example: We have an abundance of stones, so we use them for the padding of the plants we are introducing in our hedges. See pic overleaf.

**First, observe. Give yourself time to watch and learn.**

Example: After considering a more interventionist hydrological redesign, we chose to wait. One and a half years of observation changed our understanding of the field and made several planned actions unnecessary.

**Once you jump to action, focus on outcomes.**

Build fast prototypes and use them to test your ideas. Discard what doesn't work and keep what does.

# Example: Stone padding



Management

# Our soil reality

Before doing anything, we tried to understand what the field was already telling us.

Our soil shows clear signs of long-term erosion caused by decades of intensive tillage. This is visible in exposed roots, high surface stoniness and a progressive loss of soil from south to north, with the most degraded area in the north-west corner.

The dominant spontaneous species are grama (*Cynodon dactylon*) and oxalis (*Oxalis pes-caprae*). These plants are bioindicators. They signal compacted soil, low organic matter and reduced biological activity. Their root systems work to reopen soil structure and improve infiltration.

This reading changed our priorities. Soil regeneration came before production optimisation.

# No-till practice

We follow and strongly recommend a no-till model, where a permanent vegetable cover is allowed to develop.

This allows to...

- Loosen the soil with their root action, allowing higher rainwater infiltration.
- Lower erosion and increase humidity retention.
- Boost the presence of pollinators, which in turn keep the balance of other species.
- Save a lot of energy and money in pointless, “traditional farming” activities (tilling, spreading biocides, adding fertilisers, etc.)

# Why no-till worked for us

Our commitment to no-till is not ideological.

After extreme rainfall events in the Valencia region in autumn 2024, the field absorbed most of the water without forming deep erosion channels.

This behaviour contrasted with nearby tilled fields. The main difference was the permanent vegetal cover.

The conclusion was simple: vegetation is not competing with the olive trees; it is protecting them.

For this reason, we avoid any mechanical soil disturbance and let roots do the work that machinery would otherwise destroy.

# Mapping

The first step to find yourself is to know where everything is to make a master plan of your field.

We recommend you compile as many levels of information as you can and add them to a digital map in the form of layers.

Among others, our master map has a botanical distribution, infrastructure (electrical, water), sun/shade areas in the summer and winter

This is useful in all types of situations, by yourself or working with collaborators, ranging from “how do I get there” to “where should we stockpile the manure” to “where is the water pipe”.

# Administration

Find out the legal requirements in your country and region.

In our case (Valencia, Spain), we are required to update the data regarding our farming practices in two registries. This happens yearly.

Those documents must be presented at the olive mill when you bring the harvest for pressing.

Also, it is good to be aware of your legal and administrative status in case the rural police shows up or any procedure is requested (e.g., we are officially dryland, so in theory absolutely no form of watering is allowed! – this is kind of absurd, but at least we are aware of the official policy).

# Guidelines

# Know your soil

Make a quick test to establish your type of soil.

Dig a sample, mix with water in a tall glass container and wait for it to settle. Repeat in different parts of your field.

Reference: [Step-by-step video](#).

In our case, our soil is mostly clay, with some sand and silt.

# The clay fraction of our soil



# Green cover management

We do not manage vegetation continuously; we intervene only when necessary.

Our rule is simple: If water is not limiting, we do nothing.

When spring rains stop and competition for water begins, we cut only under the tree canopy.

The cut biomass is always left in place as mulch.

In most years, this means one cut. In wet years, it may be two. We never cut the entire field.

This approach keeps labour low and soil always covered.

# Our green cover at night



# Mulch, mulch, and mulch some more

Best advice ever: Get a woodchipper!

This will allow you to break down medium- and small-diameter branches into small bits you can spread all over your field.

As those wooden bits rot, they feed the microorganisms in the soil and accelerate the synergies within.

Also, it is a phenomenal mindfulness activity for persons of all ages. We have seen restless kids fall into a meditative state using our chipper.

As you begin to take care of your soil, avoid at all costs to have anything heavy like tractors or other machinery drive over your field.

# Read water and erosion

Before adding anything to the field, we observed how water moved.

Paths and tracks act as water collectors during heavy rain. In our case, runoff entered the field mainly from the northern boundary. Sedimentation zones became visible after storms.

These observations informed where we reinforced vegetation, where we avoided disturbance and where hedges would be most effective.

Do your best to capture all rainwater, and either store in a cistern or facilitate its infiltration in the soil.

Reference: [Water Harvester: An Invitation to Abundance](#)

# Rainwater capture

We created this quick prototype to capture and infiltrate water running along a pathway.



# Botanical inventory

Take some time to walk around and take pictures of all the plants you can find.

Use [PlantNet](#) to identify them.

Tip: It's more reliable if you try to identify the plants when they are flowering.

File your findings in a simple document and update it over time to reflect the development of biodiversity you will hopefully bring.

## Botanical inventory

A census of plant species present in Vora Riu

January 2026

# Hedges as infrastructure

Hedges are not ornamental. In our system they serve five functions:

- Soil stabilisation and erosion control
- Wind protection
- Biomass generation
- Habitat for beneficial insects
- Physical reinforcement of boundaries

We plant hedges gradually. Large species first, smaller ones later. Most species require watering only in the first year.

Phasing is essential. It avoids overload and allows the field to absorb change.

# Biodiversity

Depending on your location, climate, type of soil and the specific conditions of your field, plan the introduction of additional species.

In our case, we are working with three hedges that run along the path leading to our field as well as the permanent cover for the grove.

We have introduced ~20 new species in 2025, and plan to add another 20-30 in the next 1-2 years.

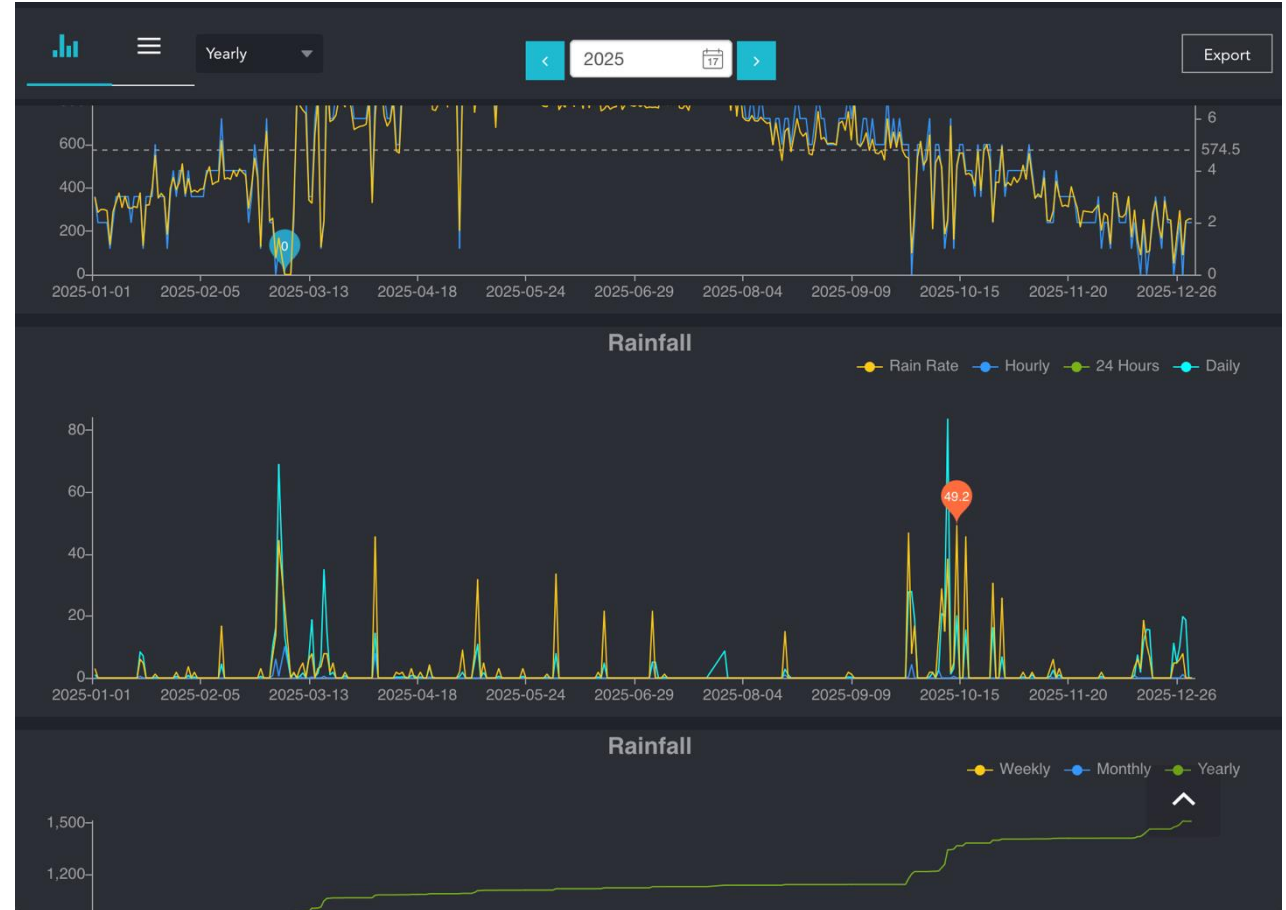
Additionally, we have designed a mix of seeds that works well with olive trees. Our intention is to prepare seed bombs ahead of the 2026 autumn rains, when we will spread them.

# Weather

Consider investing in a simple meteorological station.

The most relevant parameters we collect with ours are temperature and rainfall.

These are not metrics you use to “do” something, but they are useful to make sense of things and have a feel of how much the trees may be suffering due to extreme temperatures or lack of rain.



# Olive harvesting

We're assuming you're interested in making olive oil.

At the very least, you will need olive combs and long sticks in your hands to get the olives, and olive nets/blankets on the ground to collect them.

An upgrade worth the cost is an electric hand-held harvester. It speeds up the process significantly.

If you cannot afford fancy tools, invite friends over and turn the harvest into a social event.

You should take your olives to the mill as quickly as possible. Each place has different rules, but in general the pressing should be done within 48 hours of harvesting.

# Production tracking

First harvest should allow you to establish your baseline.

In our case, we produced 266 kg.

Over time, as you develop your project, you will be able to observe how your management model is impacting the production.

Our second harvest yielded 474 kg (78% more).

While we are convinced this partly due to our agricultural practices, the weather has helped greatly this year.

**A part of our harvest, before pressing**



# Watering

Our long-term objective is dryland farming.

However, trees have a memory. When olives come from a system with irrigation and chemical fertilisers, as with the previous owner, removing all support abruptly creates stress.

Where water is available, we see irrigation as a temporary tool:

- Used only during extreme drought
- Reduced progressively over the years
- Never used to push production

Newly planted species in hedges receive water during their first one or two summers only.

Obviously, if you have access to irrigation water, your project will have a different configuration.

# Fertilising

Ballpark, every two years you should add manure to your field. It brings organic matter that the microorganisms in your soil love.

This can be from cows, sheep, goats, or horses. Select a friendly local farmer that is clean and diligent, otherwise you will find a lot of impurities in your dung (plastics, rubble, etc.)

In our case, we go for well-matured sheep manure. We add 30-40 kg per large tree and 20 kg per smaller tree. Application is done after harvest, between December and January.

Manure is dropped in one or several piles and distributed manually to avoid compaction from machinery.

This single intervention has allowed to reactivate soil biology without creating dependency.

# Pruning

Depending on your situation this may be imperative or optional.

We recommend you work with a specialist, and you stay with the same person over a long period of time so that person's criterion is transferred to how the trees develop.

If you switch from one pruner to another, their approaches will be overlapping and the trees will have a more erratic growth.

# Stockpiling

Most likely you will start to have several piles of materials.

These include:

- Rocks (in our case we have a lot of them!)
- Mulch and pruning debris
- Rubble
- Soil
- Ash (if you have a chimney)
- Wood

Spend some time designing where you will place them and how you may use them

# Some of our stockpiles



# Annual management calendar

This calendar is intentionally light. If it feels busy, it is too much.

## **Winter**

(Dec–Feb)

Manure application,  
every two years

Light pruning, avoiding  
frost periods

Hedge planting

Mapping updates and  
planning

## **Early spring**

(Mar–Apr)

Observation only

No intervention unless  
exceptional growth  
occurs

## **Late spring**

(May–Jun)

First selective cut under  
tree canopies if water  
competition appears

Leave biomass as mulch

## **Summer**

(Jul–Aug)

No field work

Emergency watering only  
if available and strictly  
necessary

Spot watering of young  
hedge plants

## **Autumn**

(Sep– Nov)

Olive harvest

Optional sowing of  
additional cover species  
or legumes

Post-rain observation of  
runoff and soil response

# Tools checklist

## Basic

- Wheelbarrow
- Spade
- Hoe
- Pick
- Pruning shears

## Additional

- Regular drill and/or hammer drill
- Hose and/or watering can
- Woodchipper
- Electric olive harvester
- Chainsaw

Final thought

# Find your model

Circling back to the first pages, we are not here to establish a right way of managing an olive grove.

Our goal is to share and learn.

The guidelines in this manual are given as a reference point, but nothing beats practice and ownership.

Try things, observe and reflect.

You will have a blast.

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