FIELD REPORT

ReForest Vjosa

Report 2024–2026



SEASONS	Planting seasons 2024/2025 and 2025/2026, outlook 2026/2027
SITE	Vjosa floodplain at Tepelenë, Vjosa Wild River National Park, Albania
AUTHOR	Pietro Steffano, project coordinator
DATE	November 2026

PARTNERS

RiverWatch EcoAlbania patagonia®

Cover: AI visualisation of a restored Vjosa floodplain, not a photograph.

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01

Summary

20,000
willows and poplars planted in fenced plots, 2024–2026

0.90 ha
fenced against grazing

9,200
young plants alive after the November 2025 flood

~4,000
young plants ready for 2026/27

WHAT WE DID

Between December 2024 and October 2026 the project planted 20,000 willows and poplars in fenced plots on the Vjosa floodplain at Tepelenë: 8,000 in the first season and 12,000 in the second. Alongside the planting, the nursery was built up to raise six native riparian tree species, and this season for the first time also from seed.

WHAT HAPPENED

The river tested the work hard. In winter 2025/26 floods eroded about 3.1 hectares of floodplain and took two of the six plots, with around 4,000 young plants. The four remaining plots came through with 9,200 plants. Then July and August 2026 brought temperatures above 40 °C and only one real rain in 60 days. By September an estimated 50% of the poplars and 35% of the willows were still alive.

WHAT WE LEARNED

Five things change from now on. Plots move further from the active river channel. Planting happens between November and the end of February, preferably in November and December. Every plant goes into a shallow dip that holds water. Plants are watered through the summer, with more efficient irrigation. And more plants are raised from seed, which survived the summer best.

WHAT COMES NEXT

In 2026/27 the work moves downstream to Kutë, where the floodplain is wider and grazing lighter. About 4,000 young plants from the Tepelenë nursery will be planted in a 24 ha priority area from November 2026.



Photo © Joshua D. Lim

02

The *project*

"The team on the ground is a coordinator and two part-time workers, with volunteers alongside them."



Photo © Joshua D. Lim

02 · THE PROJECT

SITE AND APPROACH

ReForest Vjosa restores floodplain forest on degraded, overgrazed land along the Vjosa at Tepelenë, inside the Vjosa Wild River National Park. Cuttings and seeds are collected from wild trees at seven places along the river (Tepelenë, Bença, Dragot, Ura e Leklit, Picar, Memaliaj and Luftinjë), raised in the project nursery (about 700 m²) and planted out into plots fenced against goats and cows.

Collection is spread across places, populations, times of the season and the number and age of the mother plants, to keep the genetic base of the planted stock as broad as possible.

TEAM

The team on the ground is a coordinator and two part-time workers (20 hours a week), supported by volunteers. In 2024/25 one long-term volunteer from Germany worked in the field, and an open planting day on 21 March 2025, the International Day of Forests, brought almost a hundred people from the region out to plant. In 2025/26 one volunteer from Germany stayed for the whole year, joined by six more for at least four weeks each, and two planting weeks brought more than 40 people to plant, build fences and propagate plants.

ADVISORY TEAM

An advisory team of five people meets roughly every two weeks to review progress and plan how the planted communities should develop.

TERMS USED IN THIS REPORT

Unrooted cutting: a length of shoot cut from a wild willow or poplar and planted straight into a fenced plot, without rooting in the nursery first.

Rooted cutting: a cutting grown in the nursery for about a year until it has roots, then planted out.

Seedling: a young plant grown from seed, sown in the nursery or collected where it germinated on the riverbed.

Young plant: any juvenile tree, whether it started as a cutting or a seed.

Timeline

DEC 2024 – JAN 2025	First 1,400 rooted willow cuttings from the nursery planted in Area 1.
JAN – FEB 2025	Nursery stocked with 16,000 willow and poplar cuttings.
FEB – MAR 2025	Unrooted cuttings planted in Areas 2 and 3; 8,000 plants in three fenced areas (0.54 ha) in total.
21 MAR 2025	Open planting day with almost a hundred people from the region.
MID-NOV 2025	Flood erodes floodplain at the site; two plots and ~4,000 young plants lost.
EARLY JAN 2026	Second flood after heavy, prolonged rain. Over the winter about 3.1 ha of floodplain is lost.
JAN – FEB 2026	Nursery restocked with 7,510 cuttings and seedlings of six species.
MAR – MAY 2026	Intensive weeding in the nursery and the fenced areas.

MAY – SEP 2026	40 days of hand watering, most in the July–August heatwave.
SEP 2026	Final survey of the season: poplars ~50%, willows ~35% alive.
NOV 2026	Planting starts at Kutë.



Photo © Joshua D. Lim



03

Season *2024/25*

“8,000 young plants on 0.54 hectares of degraded floodplain.”

Photo © Joshua D. Lim

03 · SEASON 2024/25 (DECEMBER 2024 – SEPTEMBER 2025)

8,000
plants put into fenced areas

1,400
rooted cuttings from the nursery

6,600
unrooted cuttings from wild trees

0.54 ha
fenced, in three areas

NURSERY

The nursery's first output was 1,400 rooted cuttings of four willow species (*Salix amplexicaulis, S. triandra, S. alba, S. eleagnos*). No poplars were ready yet. All 1,400 were planted in Area 1 in December 2024 and January 2025.

In January and February 2025 the nursery was restocked with 16,000 cuttings: 12,000 willows of the same four species and 4,000 poplars (*Populus alba, P. nigra*). These became the rooted cuttings planted in 2025/26.

FENCED AREAS

Three areas were cleared and fenced on the Tepelenë floodplain, protecting 0.54 ha from grazing.

Area 1	0.14 ha	1,400 rooted cuttings from the nursery (December 2024 – January 2025) plus 1,600 unrooted cuttings.
Area 2	0.20 ha	2,000 unrooted cuttings, February 2025.
Area 3	0.20 ha	3,000 unrooted cuttings, February and March 2025. This area survived the flood and is now part of today's Area 1.

Cuttings planted between 1 and 21 March 2025 rooted poorly. Since then nothing has been planted after the end of February.



Figure 1 Building a fence around a restoration area. Photo © Joshua D. Lim



04

Season *2025/26*

“Over the winter the river eroded about 3.1 hectares of floodplain at the site.”

04 · SEASON 2025/26 (OCTOBER 2025 – SEPTEMBER 2026)

12,000
rooted cuttings planted in six areas

~3.1 ha
of floodplain eroded in winter 2025/26

9,200
young plants in the four areas that survived

40
days of hand watering in summer

Weather and *floods*

The winter was wet: it rained on almost half of all days. In mid-November 2025 and again in the first days of January 2026, heavy and prolonged rain across the catchment raised the Vjosa until it flooded the whole active floodplain. Erosion and deposition reshaped the river. On the left bank downstream of the Vjosa–Drino confluence the river removed about 3.1 ha of floodplain over the winter, including two of the fenced areas. Since 2022 it has taken about 5 ha at this spot.

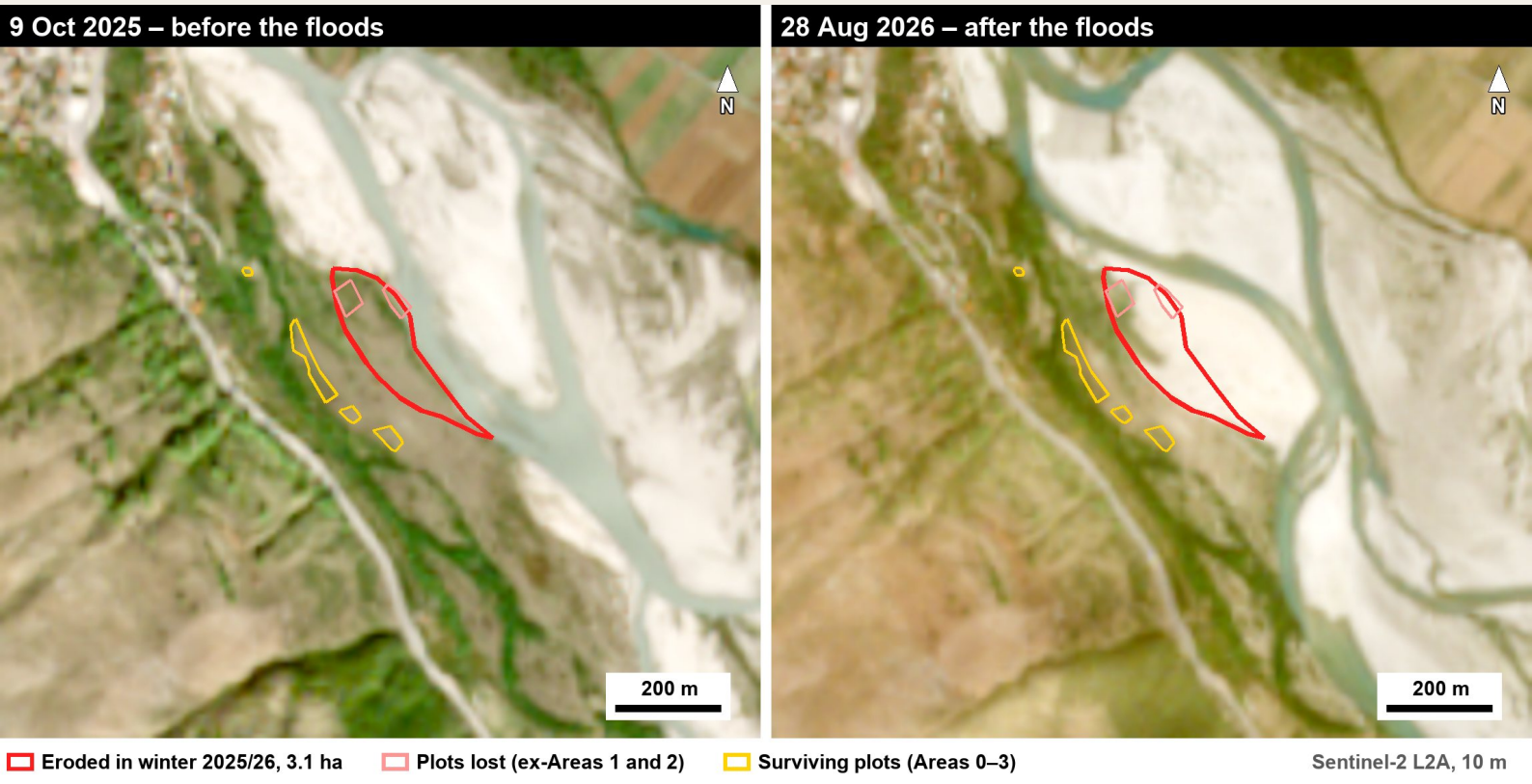


Figure 2 The Tepelenë floodplain before (9 October 2025) and after (28 August 2026) the winter floods. Red: 3.1 ha of floodplain eroded in winter 2025/26. Pink: the two fenced areas lost. Yellow: the four that survived. Sentinel-2 L2A, 10 m resolution; erosion outline mapped by Pietro Steffano.

Spring alternated rain and sun, good growing weather. Then the rain almost stopped: five rainy days in June, two very light showers in July (under 1 mm) and one real rain in August (50 mm). July and August brought extreme heat, with peaks above 40 °C. With only one significant rain in 60 days, the young plants came under severe stress. In September the heatwaves eased and five

rain events improved conditions.

SOURCE

The figures above come from simple measurements on site: a rain gauge and a car thermometer, which read up to 44 °C. The chart below shows the same season from regional climate data.

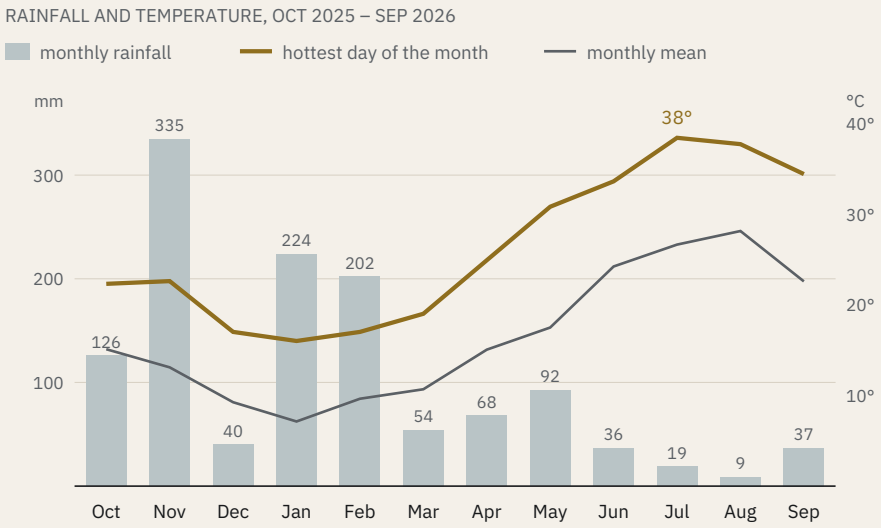


Figure 3 Monthly rainfall and temperature near Tepelenë. ERA5 reanalysis (Copernicus Climate Change Service), via Open-Meteo. ERA5 works on a grid of about 25 km, so it smooths out local storms and reads cooler than a thermometer on site.

Planting

FENCED AREAS

Six areas were fenced, protecting 0.90 ha from grazing. Fences are 2 m iron posts set 2 m apart, joined by three strands of wire carrying metal mesh. Inside, brambles and invasive weeds were cleared with a brushcutter before planting.

The nursery supplied 12,000 rooted willow and poplar cuttings, which were planted in the six areas: poplars spaced evenly, with willows of mixed species planted at random between them. Holes were dug with spades; a motor auger was used only where the ground is silty to clayey and too hard to dig by hand. Every hole was then widened into a shallow dip around the stem, to hold water and mulch.

The November flood washed away ex-Areas 1 and 2, the two areas planted in 2024/25. The loss is estimated at about 4,000 young plants: 2,800 planted in the weeks before the flood and 1,200 survivors from the first season.

The four remaining areas (0.55 ha) came through the flood with 9,200 rooted cuttings: 1,300 poplars (*Populus nigra, P. alba*) and 7,900 willows (*Salix alba, S. amplexicaulis, S. eleagnos, S. triandra*).

FENCED AREA	SURFACE (M²)	POPLARS	WILLOWS	TOTAL
Area 0 (control)	195	70	350	420
Area 1	3,259	570	4,200	4,770
Area 2	715	360	850	1,210
Area 3	1,342	300	2,500	2,800
Total	5,511	1,300	7,900	9,200

Table 1 Rooted cuttings in the four surviving areas. Surfaces and counts from the project GIS.



Figure 4 Fenced areas and nursery on the Tepelenë floodplain. Yellow: Areas 0–3. Red outline: ex-Areas 1 and 2, lost to the November 2025 flood.

NURSERY

In January and February 2026 the nursery was restocked for next season with six riparian species: 7,510 plants in total, 7,080 cuttings and 430 seedlings. Two experimental beds with 1,000 cuttings of plane and alder test whether these species root reliably from cuttings.

Growing from seed was new this season. Planes, white poplars, field elms and black alders were raised from seed, including juveniles that germinated on the riverbed and were moved to the nursery; eight more wild alder seedlings followed in October 2026. Cuttings were still taken from local mother plants along the Vjosa.

SPECIES	CUTTINGS	FROM SEED
Populus alba (white poplar)	2,970	200
Populus nigra (black poplar)	1,910	–
Salix alba (white willow)	1,200	–
Platanus orientalis (oriental plane)	500	180
Alnus glutinosa (black alder)	500	10
Ulmus minor (field elm)	–	40
Total	7,080	430

Table 2 Nursery stock started in January–February 2026. Willow and poplar cuttings are 81% of the total.



Figure 5 Planting rooted cuttings from the nursery. Photo © Joshua D. Lim

Summer *care*

NURSERY

From March to May the nursery beds were weeded by hand with hoes and sickles, and sprinklers watered them daily except during and after rain. In summer the automatic sprinklers kept running while the team watered the fenced areas, and weeding continued as needed.

FENCED AREAS

Weeding was heaviest in spring. Grass around each young plant was cut by hand and laid around the stem as mulch. From May onward plants were watered whenever the soil dried out: 40 days of hand watering between May and September, most of them in the hot, dry weeks of July and August, always early in the morning, when it was still around 30 °C.

Results

NURSERY

Two surveys, in May and July 2026, checked how well the new nursery stock had taken. Results varied widely by species, and plants grown from seed did better than plants grown from cuttings.

SPECIES	SUCCESS RATE	READY FOR 2026/27
Willows (cuttings)	95% May · 90% July	more than 1,000
Black poplars (cuttings)	60%	1,200
White poplars (cuttings and seed)	40% (cuttings)	1,300
Planes (cuttings)	30%	160
Elm, alder, plane (seed)	80% (20% mortality)	200
Total		about 4,000

Table 3 Nursery surveys, May and July 2026. Counts are approximate.

FENCED AREAS

Almost no plants died before June. In the July–August heat many willows dried out and lost their leaves, *Salix triandra* and *S. amplexicaulis* more than *S. alba* and *S. eleagnos*. Watering could not keep up with the extreme temperatures. Poplars suffered too, but held up better.

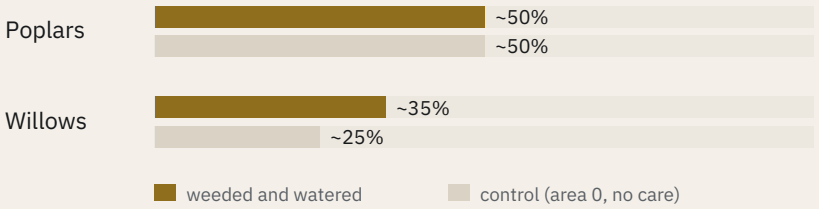


Figure 6 Willows killed by the summer heat, photographed in the fenced areas in October 2026.

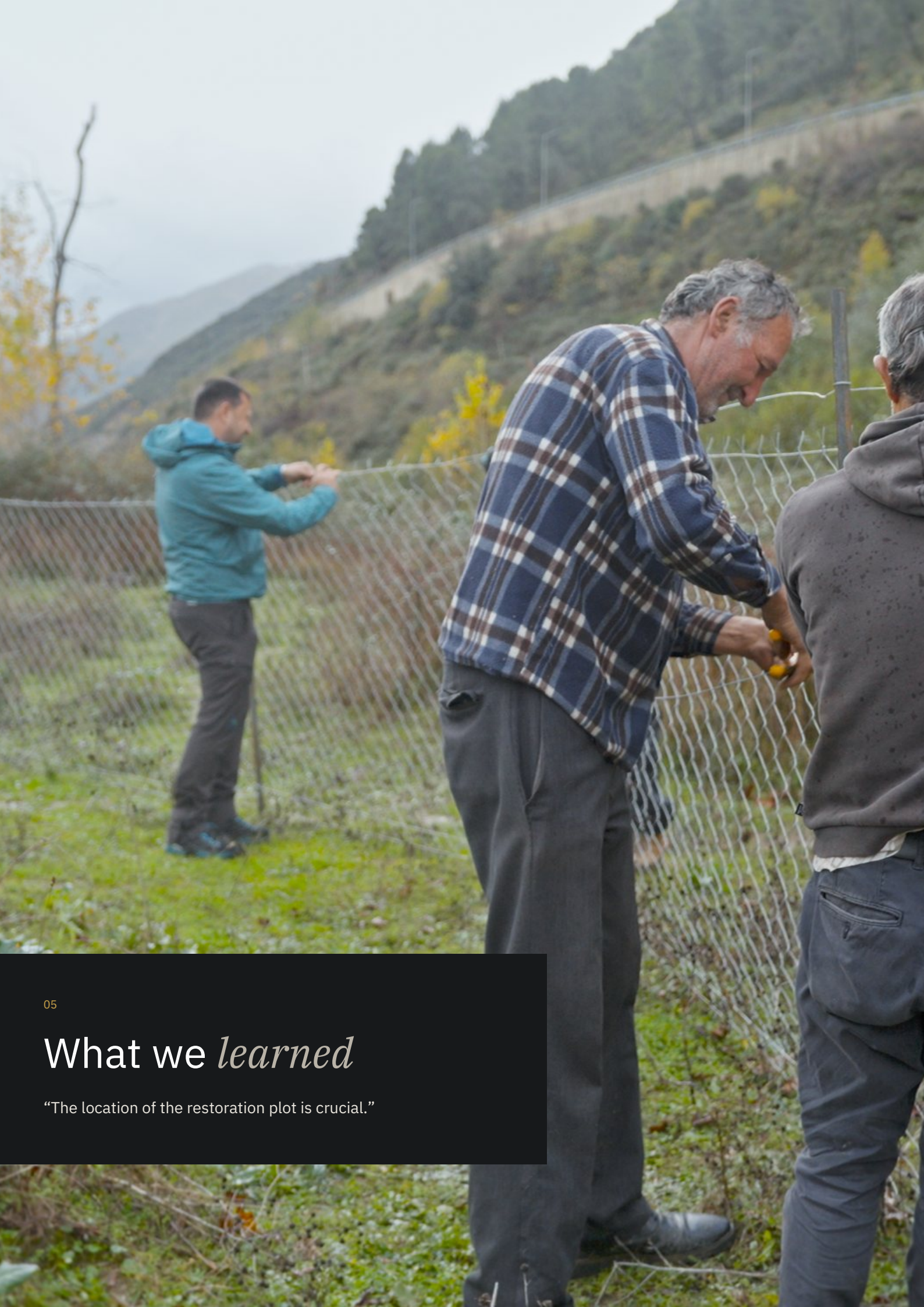
The September survey estimated survival at about 50% for both poplar species and about 35% for the willows; these are the lower, cautious

estimates. Area 0 (350 willows, 70 poplars) was left as an untreated control, with no weeding and no watering. There, about 50% of the poplars and 25% of the willows survived. Summer care made a clear difference for willows; poplars survived equally well without it.

SURVIVAL, SEPTEMBER 2026







05

What we *learned*

“The location of the restoration plot is crucial.”

05 · WHAT WE LEARNED

1 Where to plant

WHAT WE FOUND

The winter 2025/26 floods took both plots closest to the active channel and eroded about 3.1 ha of floodplain. The river is becoming more dynamic as the climate changes.

WHAT CHANGES

New sites lie further downstream, at Kutë and Rromës, where the floodplain is wider and erosion less intense. Plots keep a safe distance from the active channel.

2 When to plant

WHAT WE FOUND

Cuttings planted in March 2025 rooted poorly. Winter here is short and spring starts before 1 March. Plants put in during November and December have the longest time to root in moist ground before the summer drought.

WHAT CHANGES

Planting runs from November to the end of February, as intensively as possible on days when the soil is right, with November and December preferred. Cuttings are cut in January, while the mother plants are dormant. Fencing, cutting production and collecting wild seedlings fill the days when planting is not possible.

3 How to plant

WHAT WE FOUND

Young plants set in a shallow dip survived and grew better than the others. The dip holds water so it soaks in around the roots.

WHAT CHANGES

From next season every plant goes into a dip like the one below.



Figure 7 Poplar planted in a dip that collects water around the stem.

4 Quality of cuttings

WHAT WE FOUND

The best growth came from cuttings at least 6 mm thick at the top and longer than 35 cm, set two-thirds into the ground with at least two buds above it, cut at 45° at the bottom and stripped of side shoots.

WHAT CHANGES

This is now the standard for all cuttings.

5 Water

WHAT WE FOUND

Summer care raised willow survival from about 25% to 35%, but watering could not keep up with the extreme heat. In the nursery, sprinklers kept plants alive but used a lot of water and spread it unevenly; drip irrigation needs more care but uses water far more efficiently.

WHAT CHANGES

Irrigation methods will be tested to raise efficiency and cut water use: hand watering where precision matters and access is difficult, sprinklers where plant spacing and ground allow, and a drip system in the nursery.



Figure 8 Hand watering in a fenced area during the summer.

6 Seed or cutting

WHAT WE FOUND

Plants grown from seed developed best and survived the summer best, although more of them die just after planting out. Alder did not root reliably from cuttings; plane gave acceptable results.

WHAT CHANGES

More juveniles that germinate on exposed parts of the riverbed will be moved to the nursery, especially of species that root poorly from cuttings. The project keeps testing several propagation methods to find the best for each species.



Figure 9 Left: field elm grown from seed. Right: black alder seedlings collected in the wild and planted in the nursery.

7 Grazing

WHAT WE FOUND

The Tepelenë floodplain is heavily overgrazed by goats and cows. There is almost no natural regeneration apart from a few stunted trees; the grass is grazed short and trampled, and only bramble thickets (*Rubus ulmifolius, R. sanctus*) spread. Inside the fences the ground vegetation recovers and the forest can regenerate on its own.

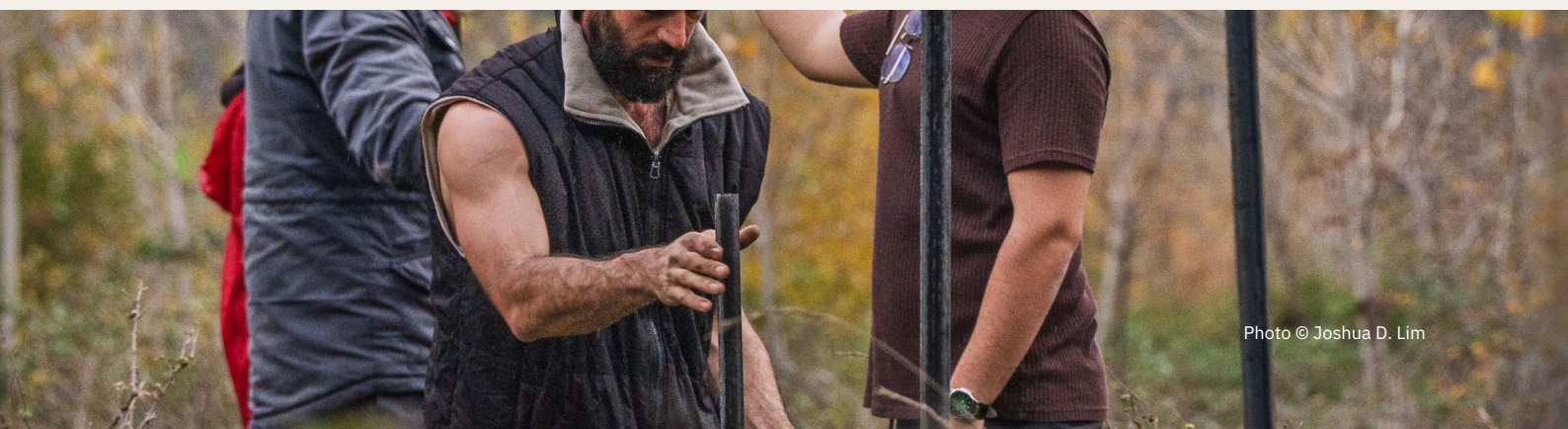


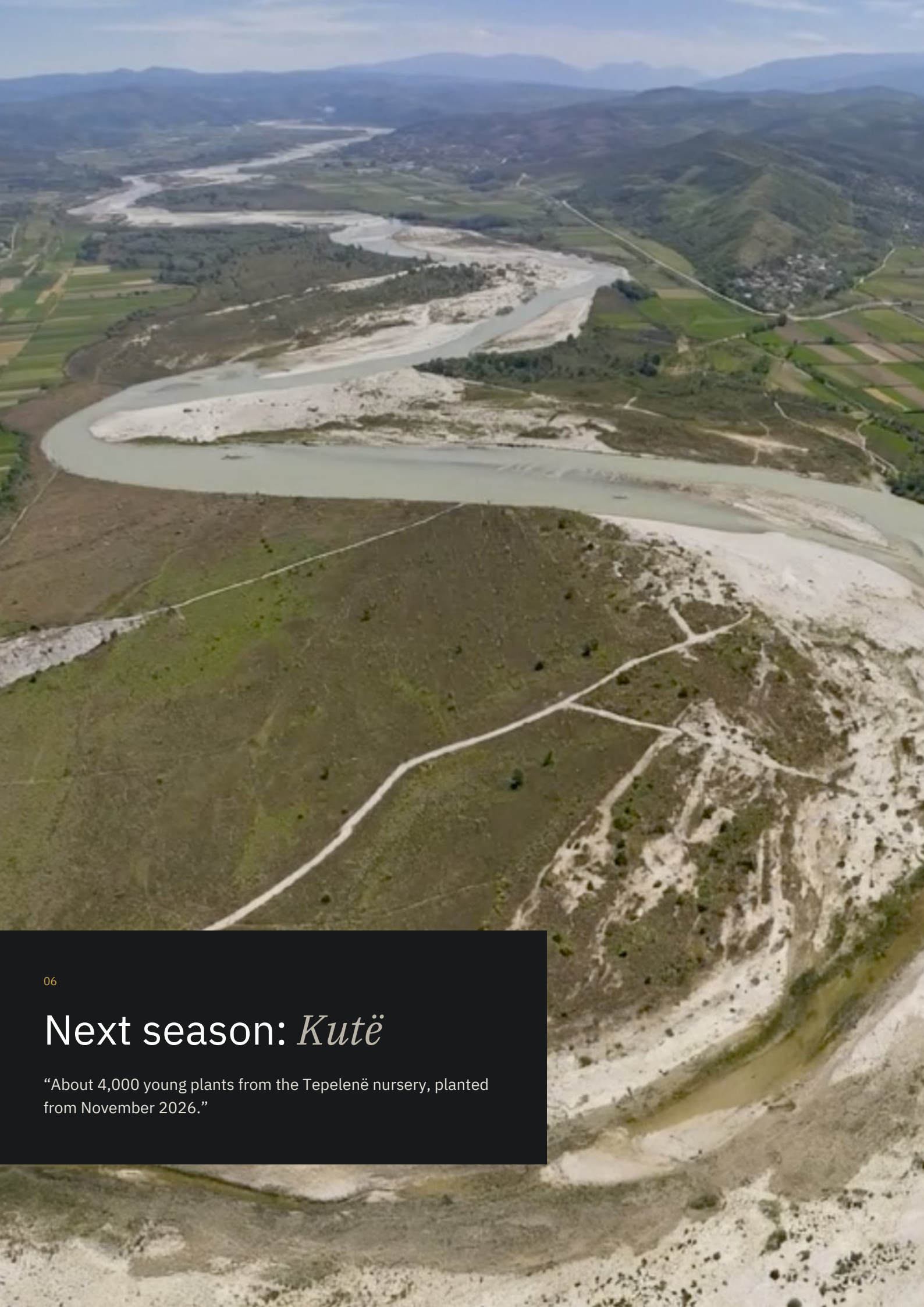
Figure 10 Willows kept small by grazing outside the fences.

8 People

WHAT WE FOUND

Workers and volunteers learned the whole job, from the details of each task to the aim of the restoration. Public planting days build acceptance and a sense of ownership in the region, and information events that explain the long-term vision keep people engaged.





06

Next season: *Kutë*

“About 4,000 young plants from the Tepelenë nursery, planted from November 2026.”

06 · NEXT SEASON: KUTË (2026/27)

24 ha
priority area, Drescher & Toromani (2023)

~4,000
young plants of pioneer species

Nov 2026
planting starts

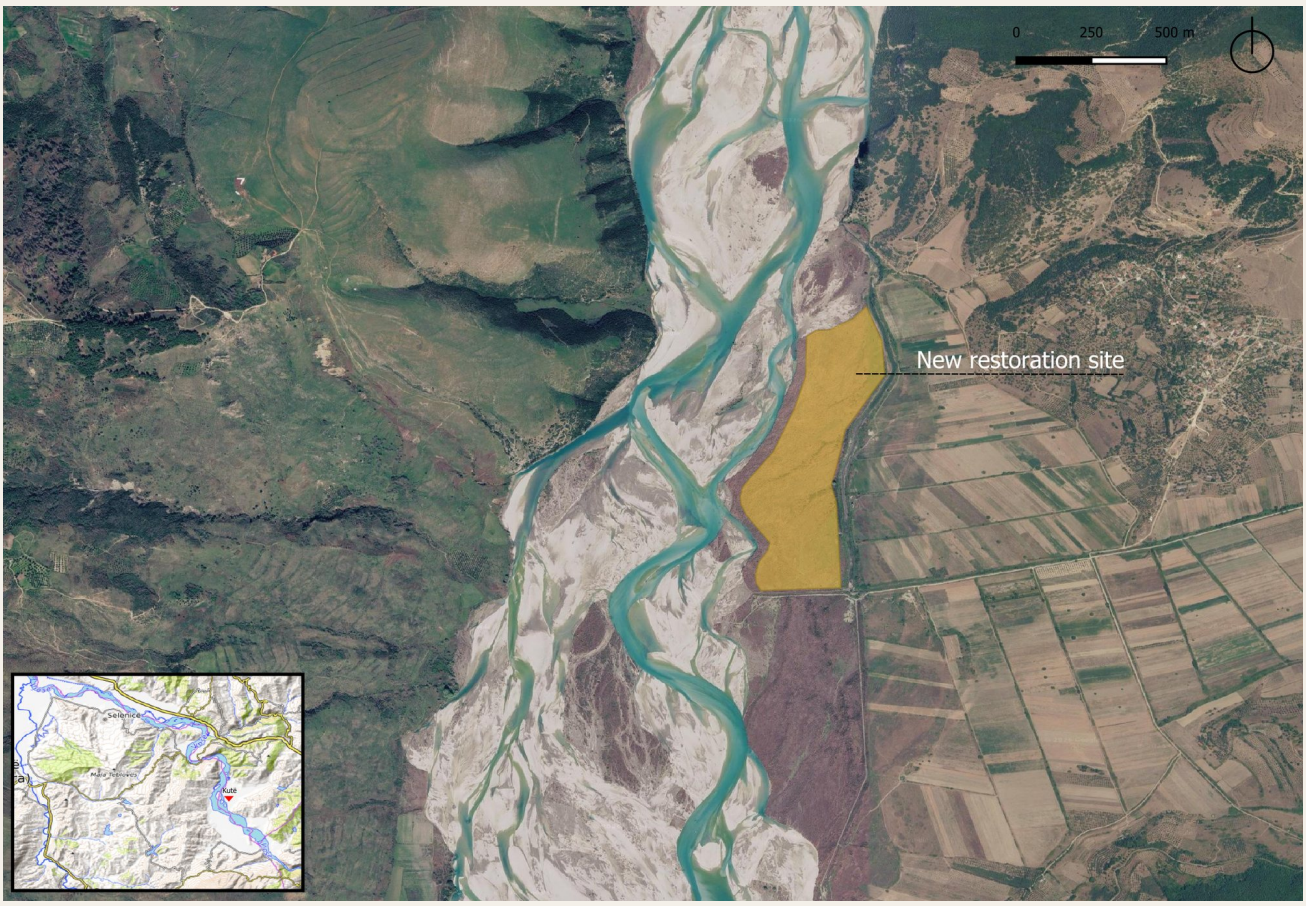


Figure 11 The new restoration site at Kutë, downstream of Tepelenë. The outline shows the indicative area of intervention.

Work moves to the floodplain on the right bank of the Vjosa in Kutë municipality. Grazing is lighter than at Tepelenë and mostly limited to the upstream half of the floodplain. Planting will take place in the most downstream part, 24 ha identified as a priority area by Drescher & Toromani (2023).

The ground is dominated by aggressive grasses, mainly *Imperata cylindrica* and *Tripidium ravennae*, favoured by burning and wood cutting. Only remnants of the natural forest remain: small, isolated groups of plane and alder, none thicker than 20 cm at breast height.

About 4,000 young plants of pioneer species, raised for a year in the Tepelenë nursery, will be planted from November in the open ground to shade out the grass. Each spot is cleared of grass and roots, dug with a dip to collect water, and mulched to keep moisture in and the grass back.

A

Annex

A1 · ALL PLANTS MANAGED, 2024–2026

Nursery		Fenced areas	
2024/2025			
Willow cuttings	12,000	Rooted willows	1,400
Poplar cuttings	4,000	Salicaceae cuttings	6,600
2025/2026			
Populus alba (c)	2,970	Rooted willows	7,900
Populus alba (s)	200	Rooted poplars	1,300
Salix alba (c)	1,200		
Populus nigra (c)	1,910		
Alnus glutinosa (c)	500		
Platanus orientalis (c)	500		
Alnus glutinosa (s)	10		
Platanus orientalis (s)	180		
Ulmus minor (s)	40		

Table 4 Plants managed in the two seasons. (c) = cuttings; (s) = from seed.

A2 · EQUIPMENT

MACHINES
Volkswagen Sharan
Brushcutter with metal disc or nylon line
Hand-held motor auger, 10 cm and 20 cm bits
Water pump, 6 m intake hose, 120 m distribution hose

HAND TOOLS	
Sickles	3
Pruning shears	5
Saws	2
Hoes	2
Rake	1
Spades	8
Shovels	8
Wheelbarrows	2