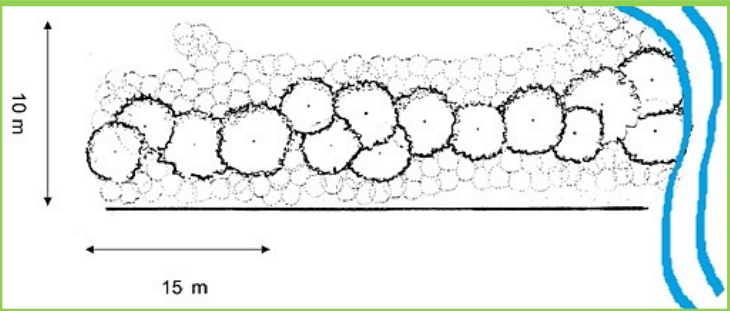


USEFUL TIPS FOR SAMPLING

Sampling area

Define a homogeneous area (similar structure and composition) we suggest 10m wide and 15m deep for a total of 150 m², but you can modify it according to the size and heterogeneity of the riparian forest.



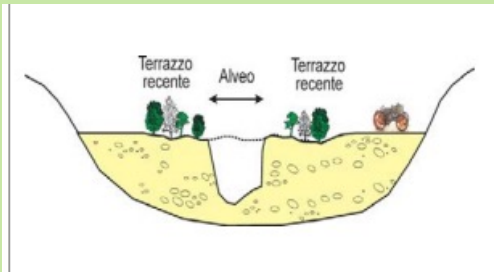
Lateral connection river-riparian wood



Trapped debris after a flood

River section

Heavily modified



Heavily modified: Both vertical river banks



Partially modified: e. g. foot consolidation with boulders

Two Vegetation layers

Evaluate two layers of vegetation separately according to the different heights at which the plants develop.

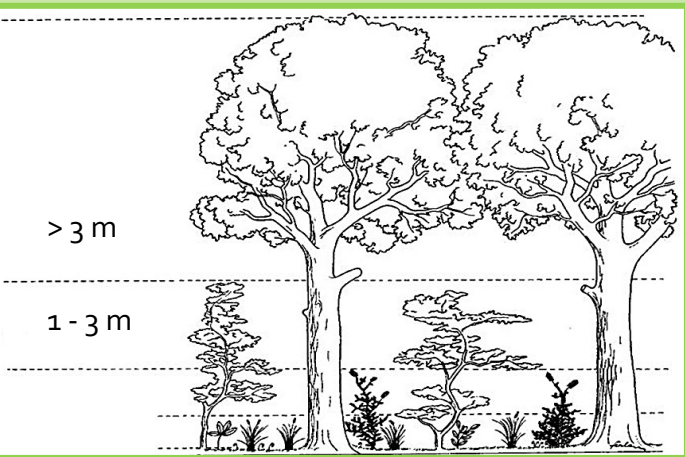
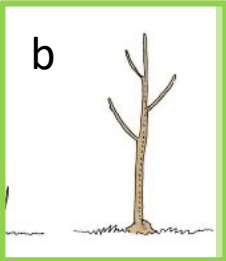
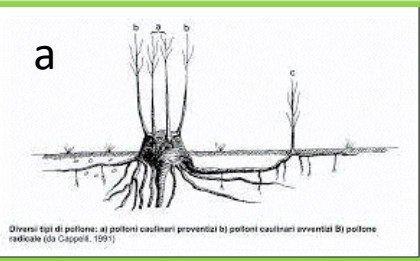
- Top layer> 3 m
- Bottom layer: between 1 and 3 m

Within each layer you need to estimate the abundance (coverage) of the species observed : rare (<5%), present (5-25%), common (26-50%) abundant (51-75%)), dominant (> 75%).

Riparian wood structure

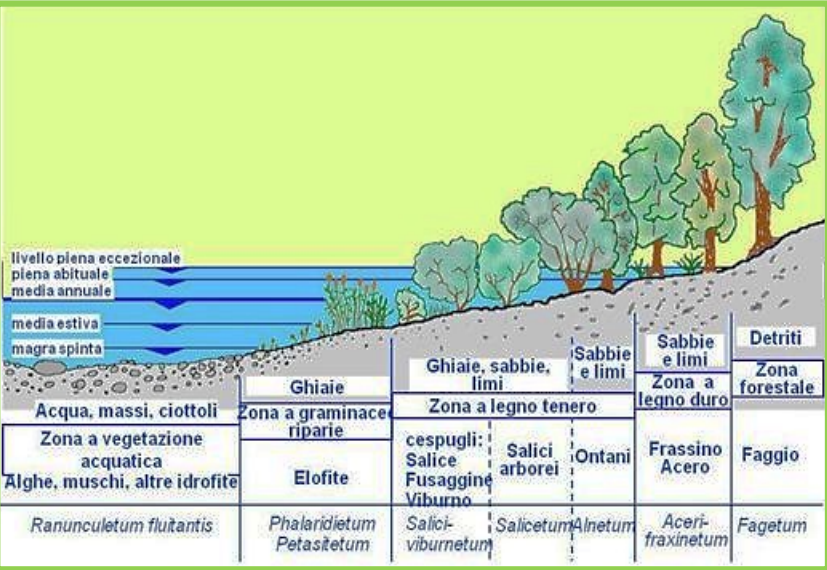


A natural forest is usually uneven (different heights = different ages) and diversified (different species), single stem (b). **Management evidence is in addition to recent cuts, stump (a) or machine footprints.**



RIAPRIAN VEGETATION

Riparian vegetation play such an important role that they become inseparable from the river in the strict sense. If left to their natural dynamics, these environments are characterized by their remarkable dynamism and habitat heterogeneity capable of supporting high biodiversity. Periodic floods are exploited by aquatic and terrestrial organisms to increase diversity and productivity; often they are more productive environments than the surrounding territories.



The species are selected above all by the water regime which conditions the texture of the soils, the availability of water and the supply of nutrients. On the edge of the shore, sometimes preceded by populations of herbaceous plants and marsh reeds immersed in the water, we almost always find thick bushes of shrubby willows (*Salix cinerea*, *Salix purpurea* e *Salix eleagnos*) followed by a row or two of Poplars (*Populus nigra*) and tree willows (*Salix alba*). These forest groups together with the Ontaneto in the finer soils, typical of riparian areas, gradually transform into mature woods composed of ash, elm, field maple, oaks, hornbeams etc

Riparian vegetation functions

FUNCTIONS WHICH THE RIVER BENEFITS DIRECTLY

- ✓ Improve water quality (BUFFER BANDS, removal of diffuse pollution eg. Nutrients);
- ✓ Sediment control (clearer waters);
- ✓ Food for aquatic organisms;
- ✓ Bank consolidation;
- ✓ Shading (cooler and more oxygenated waters);
- ✓ Habitat for fauna

FUNCTIONS WHICH THE TERRITORY BENEFITS

- ✓ Flood regulation (They work like a sponge allowing infiltration of water)
- ✓ Recharge of the aquifers
- ✓ Habitat for fauna (ecological corridor)
- ✓ Improve the landscape quality
- ✓ Improve the air quality
- ✓ Recreation areas
- ✓ Improve the quality of life

Despite its useful and numerous functions, riparian vegetation is often perceived as a source of danger and risk if not even as "dirt", in fact the term "cleaning rivers" is used when collecting and / or cutting the vegetation in the riverbed and in the river belts. This dual value of vegetation represents a challenge for the management of hydrographic basins.

RIPARIAN VEGETATION MONITORING BY CITIZENS



By Anna Carozzani

Space for River, Region or project name



Scheda campionamento



Salice bianco - *Salix alba*



Pioppo nero - *Populus nigra*



Gelso- *Morus nigra*



Acero campestre – *Acer campestre*



Ontano - *Alnus glutinosa*



Pioppo bianco - *Populus alba*



Acacia - *Robinia pseudoacacia*



Ailanto - *Ailanthus altissima*



Farnia – *Quercus robur*



Olmo - *Ulmus minor*



Falso indaco - *Amorpha fruticosa*



Acero americano - *Acer negundo*