

EVENTO FINALE LIFE PERDIX

Habitat improvement actions for Gray Partridge in the Mezzano release site

Interventi ambientali per la Starna nel Mezzano

ECOMUSEO IMPIANTO IDROVORO DI MAROZZO – Marozzo (FE)
28-11-2024

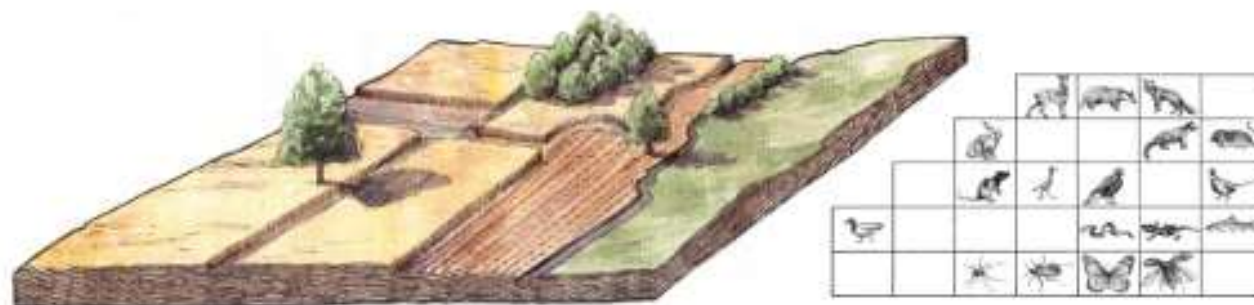
Davide Senserini

Coordinatore beneficiario

Beneficiari associati

Cofinanziatore

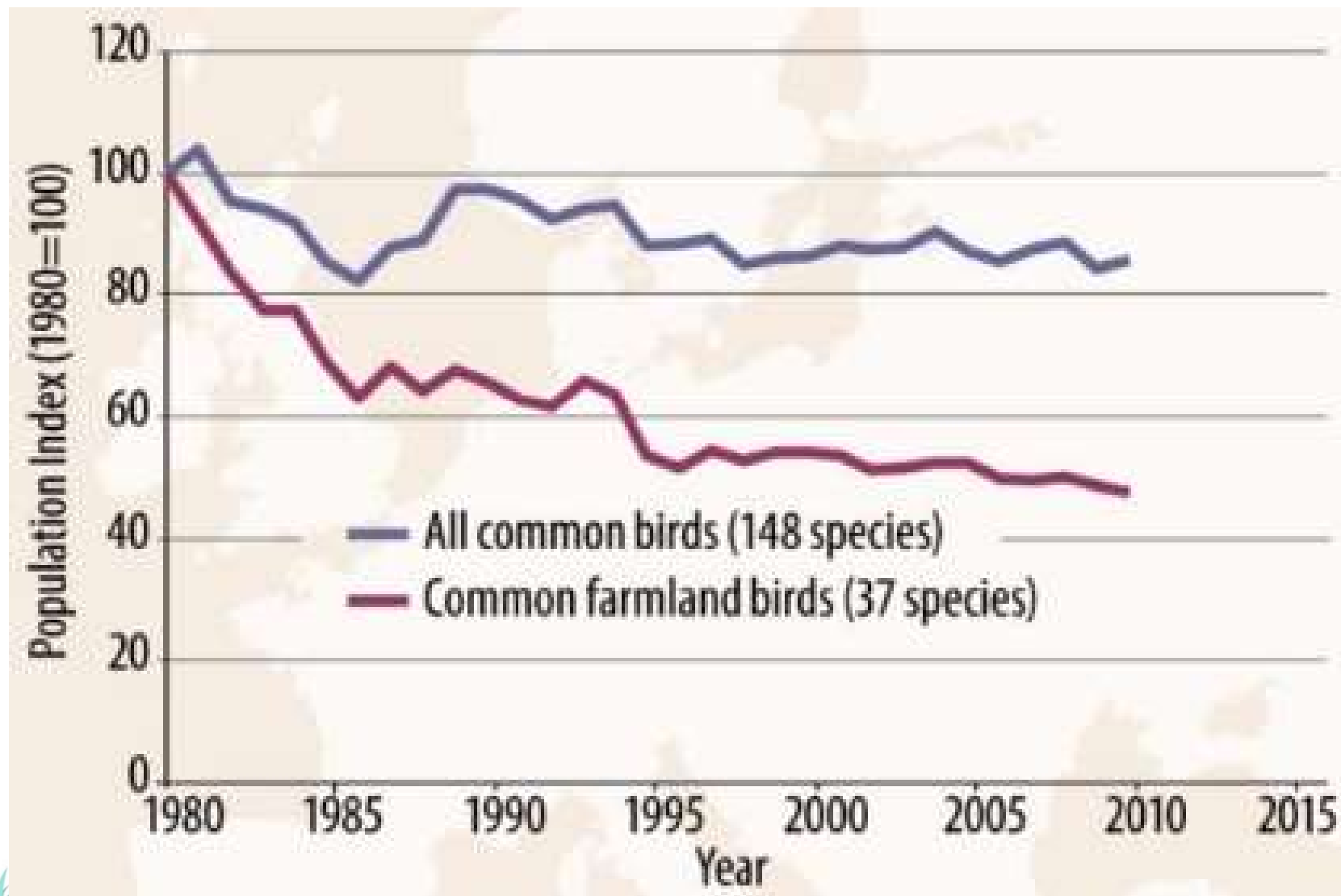
L'EVOLUZIONE DEL PAESAGGIO AGRARIO 1910-1990



Evolution of agricultural habitat in recent decades resulted in big changes in biodiversity and trophic chains



Farmland Bird Index *european trend*





1954



2010



Increase in field size and reduction of margin effect





1954



2010



Increase in forest areas







Farmers' choices are the key point for environment and wildlife







Umbrella species: species whose protection and conservation also indirectly protects many other species in the habitat where they live.

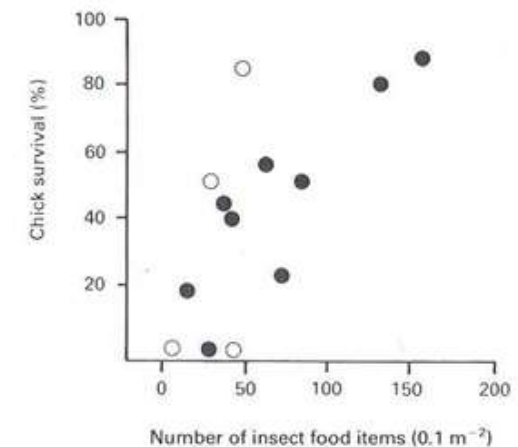


Fig. 6.5 The survival rate of chicks is directly related to the density of insect food available in the chicks' home range. Each point is a radiomarked brood. (Closed circles = Damerham, open circles = Lyons Estate.)

Environmental improvement can get it done in two ways:

- **Habitat improvement measures to increase food availability, number of refuge sites and breeding sites.**
- **Measures to limit the impact of agricultural practices (Mowing of grass during nesting period, ploughing cereal stubble, etc...)**

Environmental improvement objectives vary according to the context...





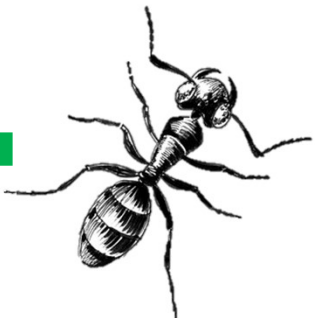
Environmental improvement objectives:

- Feed     
- Cover (autumn and winter)  
- Nesting sites  





Environmental improvement objectives:

• Feed **+++**  **=**

• Cover (autumn and winter) **=**

• Nesting sites **=**



VALLE DEL MEZZANO

- Intensive agriculture: wheat, barley, mais, sorghum, soybean, tomato, sugarbeet, etc...
- High-income crops: seed crops, organic tomato, horticultural crops
- Average size of the agricultural plots: 20 hectares (550 x 400 m)
- Very rapid change in agricultural landscape
- Extended and developed hydrographic network
- Biggest ZPS in Italy: 18000 Ha
- High wildlife density = negative perception from farmers
- High predator density: mainly diurnal raptors, corvids and small gulls



VALLE DEL MEZZANO

- **Low presence of natural or semi-natural areas:**
 - **Restoration of wet areas**
 - **Hedges and rows of windbreaks**
 - **Margins of main and secondary roads (7 to 13 meters wide)**
 - **Margins of main canals (10/15 meters wide)**
 - **Groves (<10 Ha)**





LIFE Perdix areas for habitat improvement actions within 18.000 ha:

approximately 66 Ha/years

- 56 Ha (80Ha) Consorzio di Bonifica Pianura di Ferrara
- 9 Ha Owned by farmers
- 1,5 Ha Municipality of Ostellato





LIFE Perdix budget for habitat improvement actions and late mowing: about 130.000 € for 3 years

Actions taken	Period	Surface
Environmental improvement	3 years	33 ha/year
Late mowing (after 15-30 of July)	3 years	33 ha/year

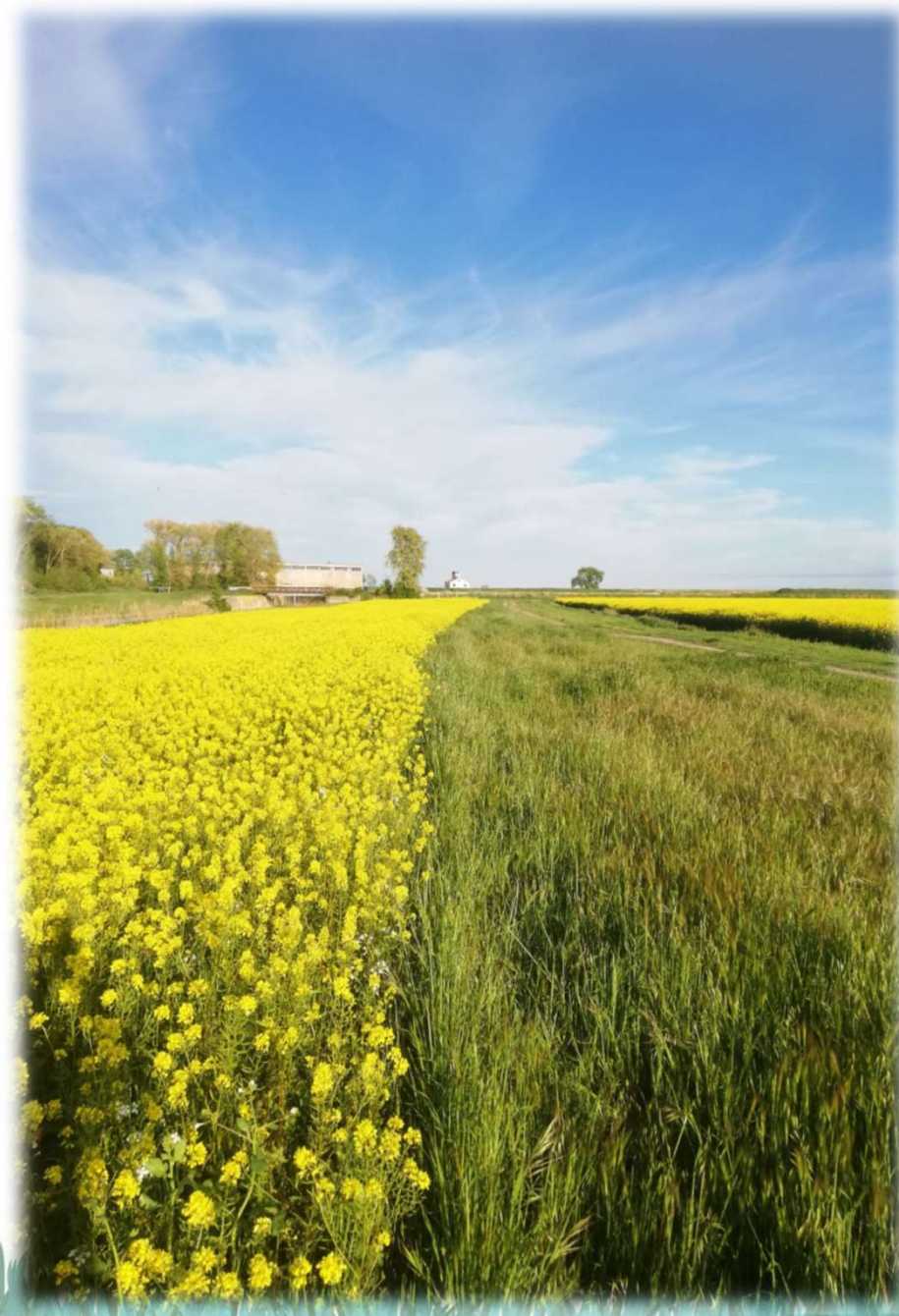




LIFE PERDIX

Game crops and “beetle banks”







AUTUMN MIXES

MIX 1 100 Kg/ha:

Avena bianca (*Avena sativa*)15%, Triticale (*Triticum x Secale*) 15%, Frumento tenero (*Triticum aestivum*)15%, Segale (*Secale cereale*)15%, Veccia sativa (*Vicia sativa*)10%, Pisello da foraggio (*Lathyrus oleraceus*)10%, Erba mazzolina (*Dactylis glomerata*) 5%, Ginestrino (*Lotus corniculatus*) 1%, Senape (*Sinapis alba*) 3%, Rafano (*Raphanus raphanistrum*)3%, Cicoria (*Cichorium intybus*) 2%, Achillea millefoglie (*Achillea millefolium*) 1%, Trifoglio ibrido (*Trifolium hybridum*) 2%, Facelia (*Phacelia tanacetifolia*) 3%.

MIX 2 70 Kg/ha:

Triticale (*Triticum x Secale*) 16%, Avena (*Avena sativa*) 15%, Veccia comune (*Vicia sativa*) 15%, Pisello proteico (*Pisum sativum*) 10%, Pisello da foraggio (*Lathyrus oleraceus*) 10%, Trifoglio incarnato (*Trifolium incarnatum*) 8%, Trifoglio alessandrino (*Trifolium alexandrinum*) 7%, Senape bianca (*Sinapis alba*) 4%, Rafano (*Raphanus raphanistrum*) 5%, Brassica (*Brassica oleracea*)5%, Facelia (*Phacelia tanacetifolia*) 5%.



Spring mixes

MIX 3 35 Kg/ha:

Erba medica (*Medicago sativa*) 25%, Loglio per. (*Lolium perenne*) 20%, Erba mazz. (*Dactylis glomerata*) 15%, Fest. Arundinacea (*Lolium arundinaceum*) 9%, Fest. Pratense (*Festuca pratensis*) 8%, Lupinella (*Onobrychis viciifolia*) 5%, Meliloto (*Melilotus officinalis*) 5%, Senape (*Sinapis alba*) 3%, Rafano (*Raphanus raphanistrum*) 3%, Tri. ibrido (*Trifolium hybridum*) 3%, Cicoria (*Cichorium intybus*) 2%, Achillea Mill. (*Achillea millefolium*) 1%, Ginestrino (*Lotus corniculatus*) 1%.

MIX 4 70 Kg/ha:

Segale (*Secale cereale*) 7%, Frum. Tenero (*Triticum aestivum*) 25%, Avena sat. (*Avena sativa*) 18 %, Veccia com. (*Vicia sativa*) 17%, Veccia vil. (*Vicia villosa*) 5%, Trif. incarnato (*Trifolium incarnatum*) 4%, Trif. Alessandrino (*Trifolium alexandrinum*) 4%, Trif. squarroso (*Trifolium squarrosum*) 5%, Senape bianca (*Sinapis alba*) 3%, Rafano (*Raphanus raphanistrum*) 9% Facelia (*Phacelia tanacetifolia*) 3%.



Spring mixes

MIX 5 30 Kg/ha:

Festuca arund. (*Lolium arundinaceum*) 37%, Erba mazz. (*Dactylis glomerata*) 23%, Loglio perenne (*Lolium perenne*) 10%, Loietto italico (*Lolium multiflorum*) 10%, Lupinella (*Onobrychis Viciifolia*) 7%, Trif. Pratense (*Trifolium pratense*) 6%, Trif. Bianco (*Trifolium repens*) 4%, Trif. Ibrido (*Trifolium hybridum*) 3%.

MIX 6 18 Kg/ha:

Trif. Incarnato (*Trifolium incarnatum*) 25%, Trif. Alessandrino (*Trifolium alexandrinum*) 20%, Trif. Squaroso (*Trifolium squarrosum*) 22%, Trif. di Micheli (*Trifolium michelianum*) 25% e Facelia (*Phacelia tanacetifolia*) 8%.

MIX 7 30 Kg/ha:

Veccia (*Vicia sativa*) 25%, Avena (*Avena sativa*) 21%, Veccia Pannonica (*Vicia pannonica* Crantz) 20%, Avena forestiera (*Avena strigosa*) 15%, Trif. Incarnato (*Trifolium incarnatum*) 7%, Trif. Squaroso (*Trifolium squarrosum*) 6%, Rafano Daikon (*Raphanus sativus* var. *longipinnatus*) 6%.

Spring mixes

MIX 8 35 Kg/ha:

Miglio (*Panicum miliaceum*) 20%, Lino (*Linum usitatissimum*) 20%, Panico moha (*Setaria italica*) 10,6%, Grano saraceno (*Fagopyrum esculentum*) 20%, Fagiolo dall'occhio (*Vigna unguiculata*) 10,6%, Sorgo (*Sorghum bicolor*) 8%, Girasole (*Helianthus annuus*)





Late mowing signs for farmers



Rete Natura 2000
dell'Emilia-Romagna




LIFE17/NAT/IT/000588 **LIFE PERDIX**
Reintroduzione della Starna italiana
ZPS Valle del Mezzano IT4060008



Aree in concessione ad ISPRA ed a servizio del progetto
Life Perdix per la reintroduzione della Starna italiana

DIVIETO DI SFALCIO-TRINCIATURA DELLA VEGETAZIONE

Coordinatore beneficiario




Beneficiari associati



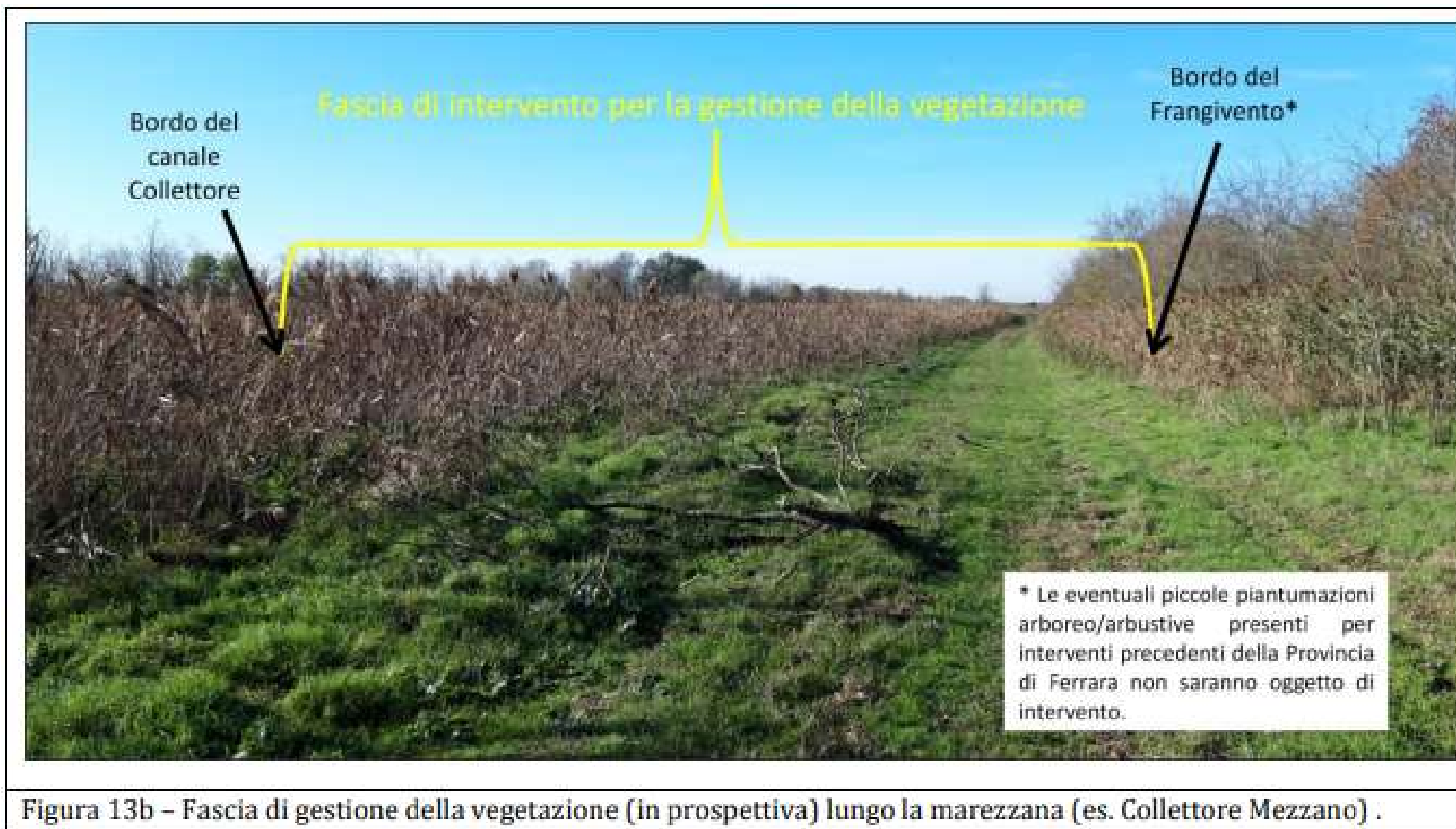


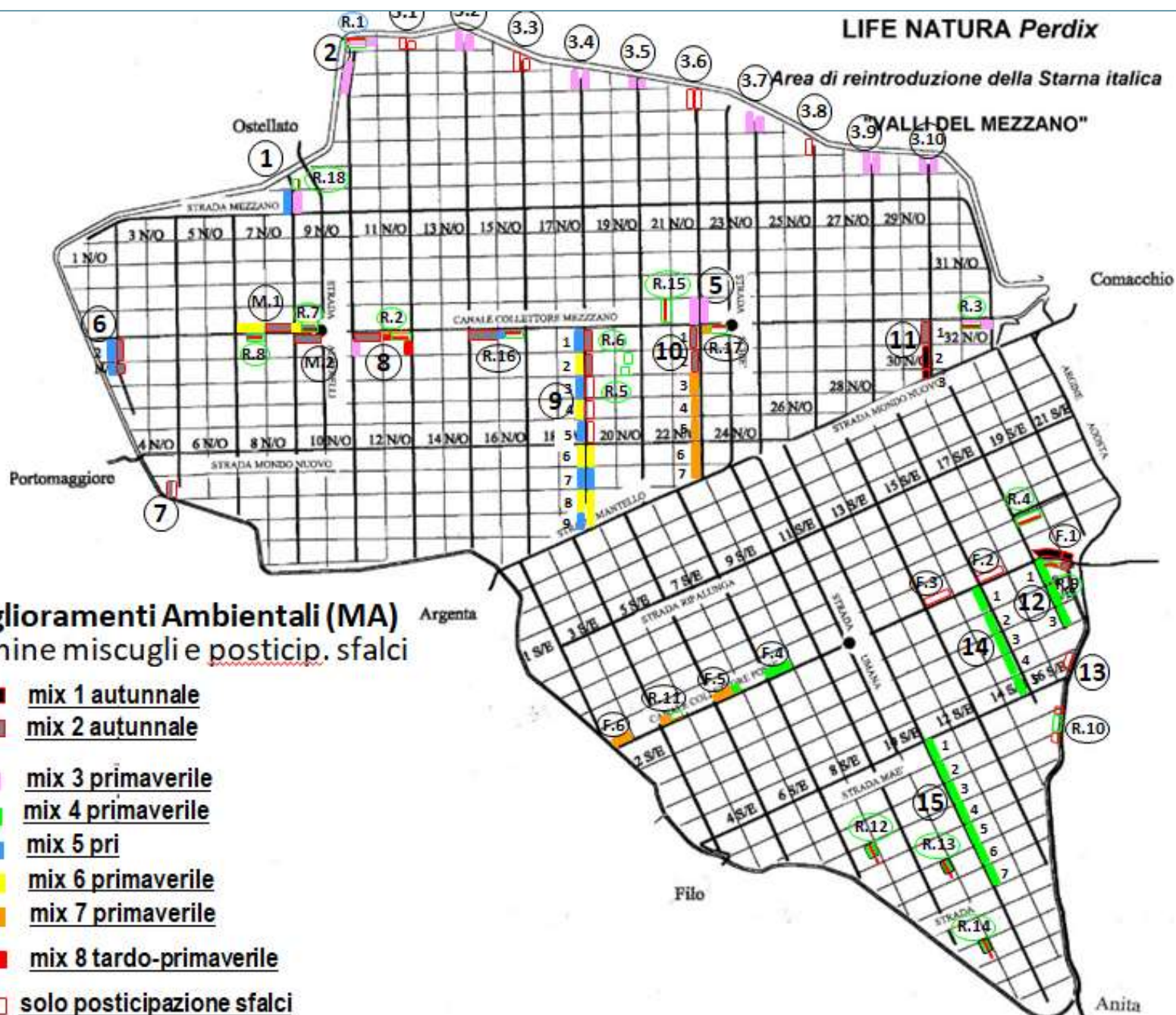


Collaboratore

















“Io sono me più il mio ambiente e se non preservo quest'ultimo non preservio me stesso.”

José Ortega y Gasset

