



# The Isonzo Rivermouth Nature Reserve



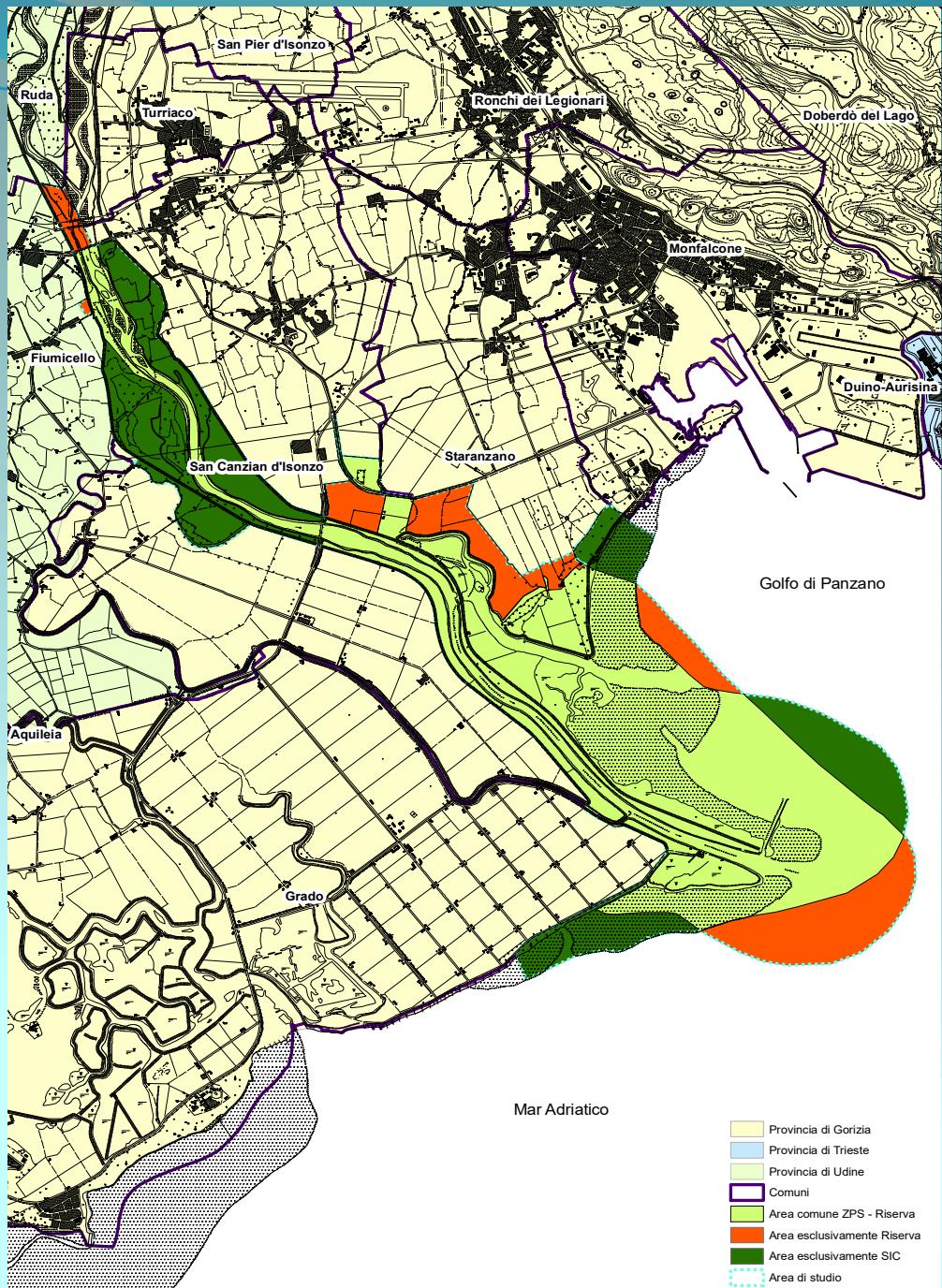
## The protected area:

- **Regional Nature Reserve (L.R. 42/1996)**
- **N2000 - ZSC/ZPS - Foce dell'Isonzo ed Isola della Cona**
- **Ramsar site**

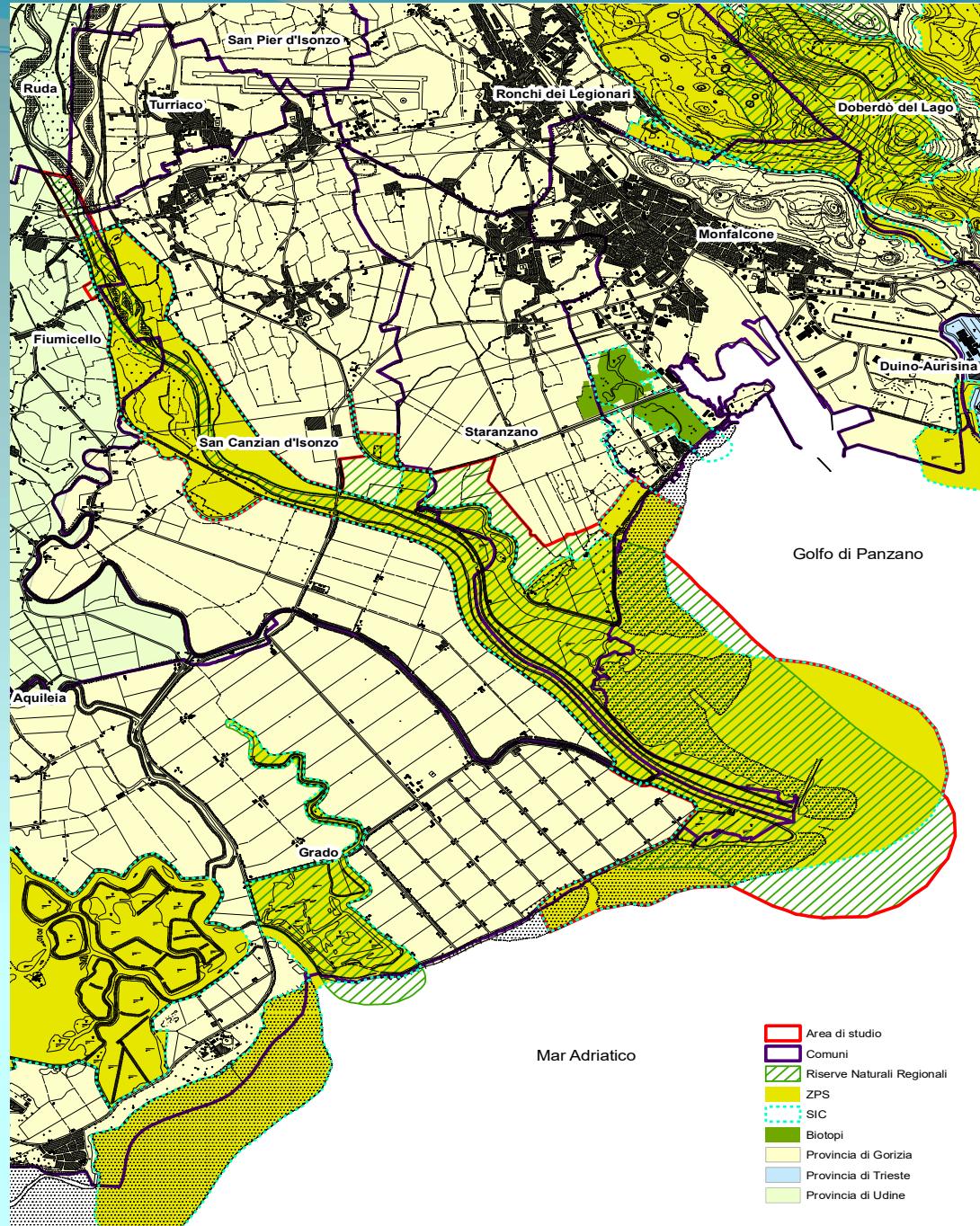


# The Nature Reserve and The Natura 2000 sites

	Area (ha)
Reserve	2392,977
ZPS/ZSC	2668,171



# Connections with others protected areas



## **Habitat e species:**

**21 habitat  
listed in annex I of Habitat Directive**



## **Habitat e species:**

**98 species listed in the Annex I of 147/09 Directive**

**20 species listed in the Annex II of 43/92 Directive**

**340 species of birds Check list**



# Habitat e species:

## **Lista degli Uccelli** **Birds Check List**

Settima edizione

7<sup>th</sup> Edition

337 specie - dicembre 2020

337 species - dicember 2020

Matteo De Luca & Silvano Candonotto



La presente check list costituisce un aggiornamento della sesta edizione (Kravos et al., 2011) e delle successive integrazioni riportate in Perco et al., 2015. Essa ricomprende le specie la cui presenza è "storicamente" nota sulla base della bibliografia disponibile, specie di recente osservazione e nuove entità derivanti da recenti revisioni sistematiche e tassonomiche (cfr. Baccetti et al., 2019). La lista Ciso-Coi degli uccelli italiani. Avocetta. In stampa). Per la sua stesura è stata considerata l'area della Riserva Naturale e la ZSC/ZPS "Foce dell'Isonzo ed Isola della Cona".

*This checklist is an update of the sixth edition (Kravos et al., 2011) and of the subsequent additions reported in Perco et al., 2015. It includes the species whose presence is "historically" known on the basis of the available bibliography, the species of recent observation and new species deriving from recent systematic and taxonomic revisions (see Baccetti et al., 2019. The Ciso-Coi list of Italian birds. Avocetta. In print). The lists refers to the area of the Nature Reserve and the ZSC/ZPS "Foce dell'Isonzo and Isola della Cona".*



## Habitat e species:



## Habitat e species:









# The restoration project of the Cona Island



**Management:**



**Municipality of Staranzano leading the Authority body (with the municipality of San Canzian, Fiumicello, Grado)**



**Scientific and technical experts**



**Visitor center, Horses, Bar, Didactical activites**

## Facilities:

### Visitor Center



***Bar and  
observatory***



### Guestrooms



# The Camargue horses



## Monitoring activity



***Birds monitoring:***

- IWC
- Point counts
- Geese counts

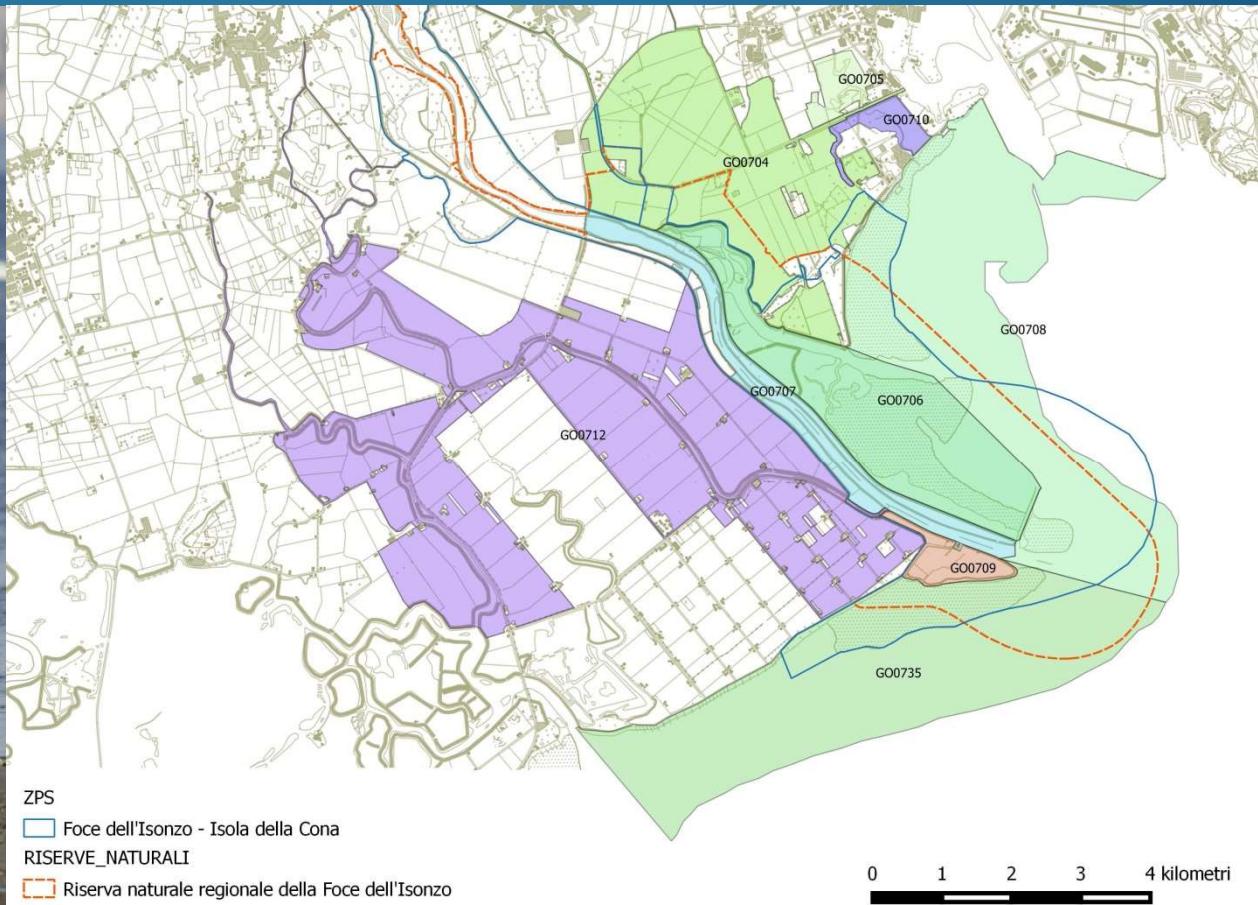
***Monitoring of species listed in Habitat Directive:***

- *Pinna nobilis*
- Fish
- Amphibians and reptiles
- Bats
- Mammals

***Other activities:***

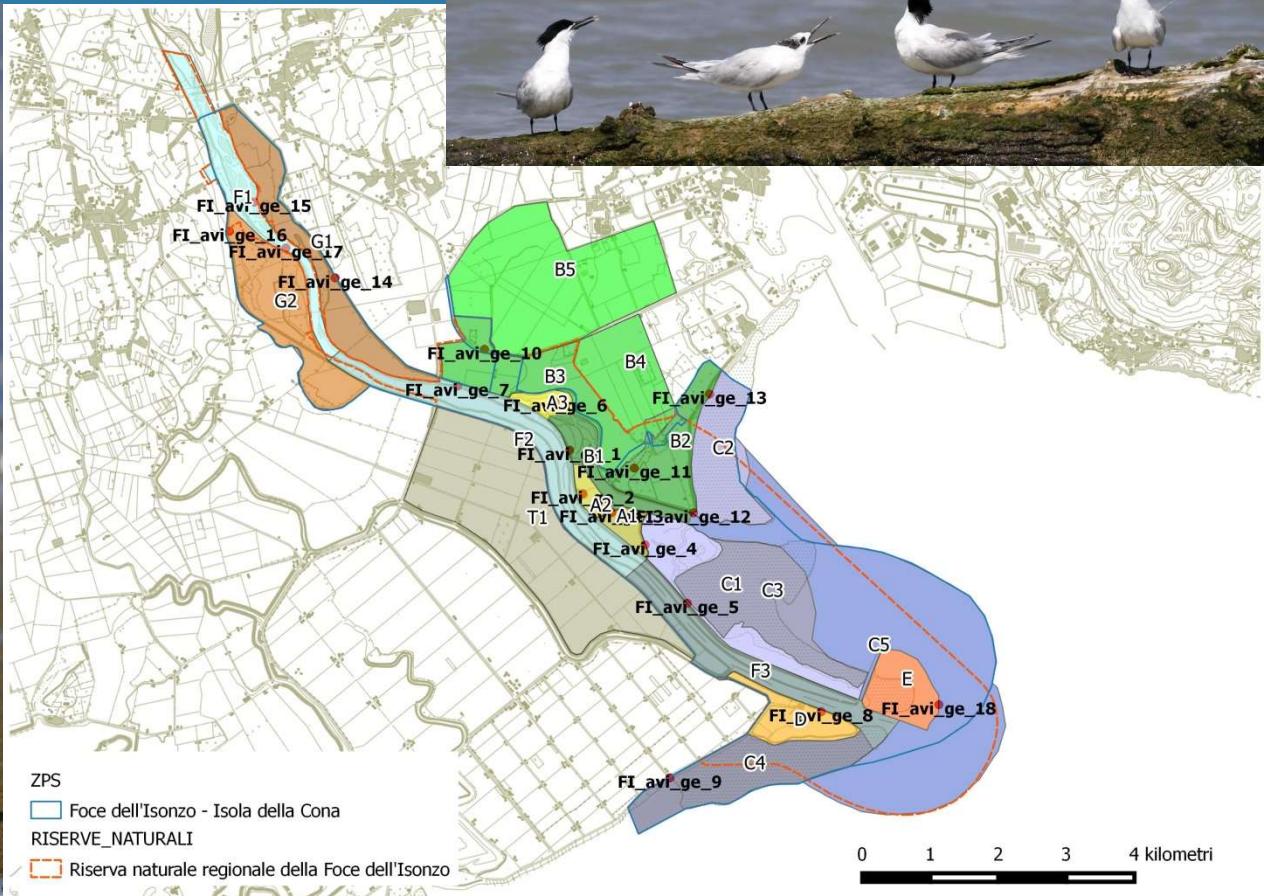
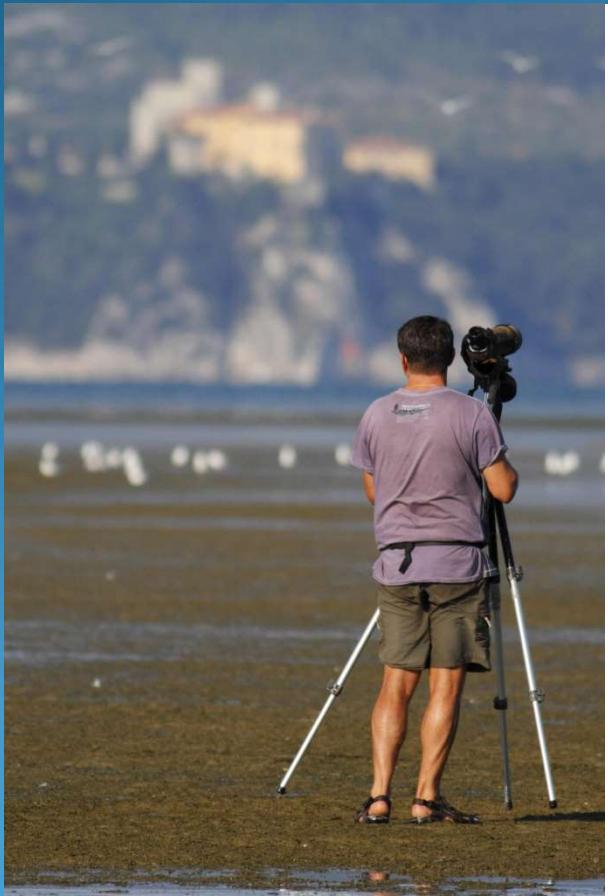
- Ring observation and recording
- Collection of occasional data
- Cooperation with different University





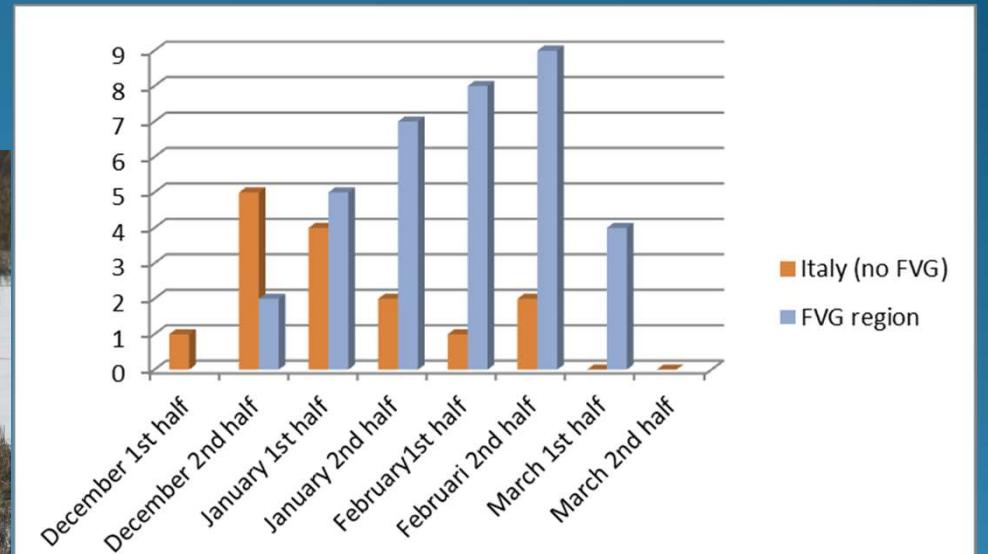
## Birds monitoring:

- Point counts (following Adriawet2000 protocol)



# Birds monitoring:

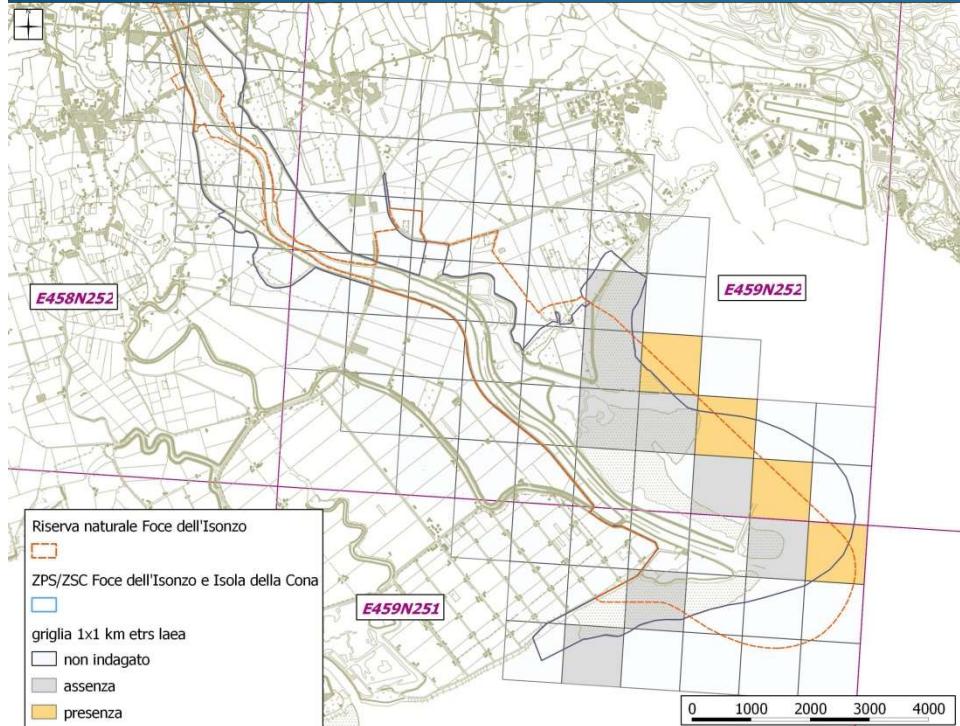
- Geese counts



point	transect	species	number	indicator	presence	year	month	day	grid	precisione (m)	zone	observer
Fl_avi_ge_	nd	Buteo buteo	1	individuals	true	2014	9	10	E4591N2524	500	B3	Silvano Candotto
Fl_avi_ge_1	nd	Anas platyrhynchos	0	individuals	true	2014	5	4	E4593N2522	500	B1	Fabio Perco
Fl_avi_ge_1	nd	Anas platyrhynchos	0	individuals	true	2014	5	10	E4593N2522	500	B1	Fabio Perco
Fl_avi_ge_1	nd	Egretta garzetta	0	individuals	true	2014	5	10	E4593N2522	500	B1	Fabio Perco
Fl_avi_ge_1	nd	Fulica atra	0	individuals	true	2014	5	4	E4593N2522	500	B1	Fabio Perco
Fl_avi_ge_1	nd	Fulica atra	0	individuals	true	2014	5	5	E4593N2522	500	B1	Silvano Candotto
Fl_avi_ge_1	nd	Fulica atra	0	individuals	true	2014	5	6	E4593N2522	500	B1	Altro
Fl_avi_ge_1	nd	Tachybaptus ruficollis	1	individuals	true	2014	5	8	E4593N2522	500	B1	Fabio Perco
Fl_avi_ge_1	nd	Tachybaptus ruficollis	0	individuals	true	2014	5	12	E4593N2522	500	B1	Altro
Fl_avi_ge_1	nd	Actitis hypoleucos	40	individuals	true	2014	8	10	E4593N2522	500	B1	Altro
Fl_avi_ge_1	nd	Alcedo atthis	1	individuals	true	2014	8	6	E4593N2522	500	B1	Fabio Perco

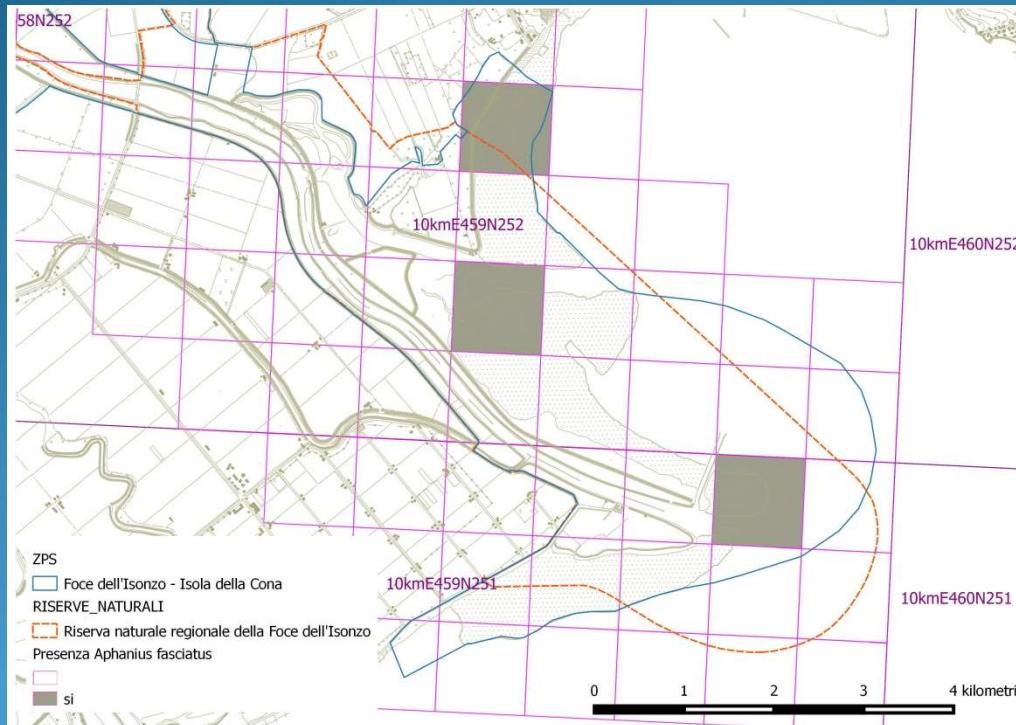
## *Monitoring of species listed in Habitat Directive:*

- Fun shell mussel *Pinna nobilis*



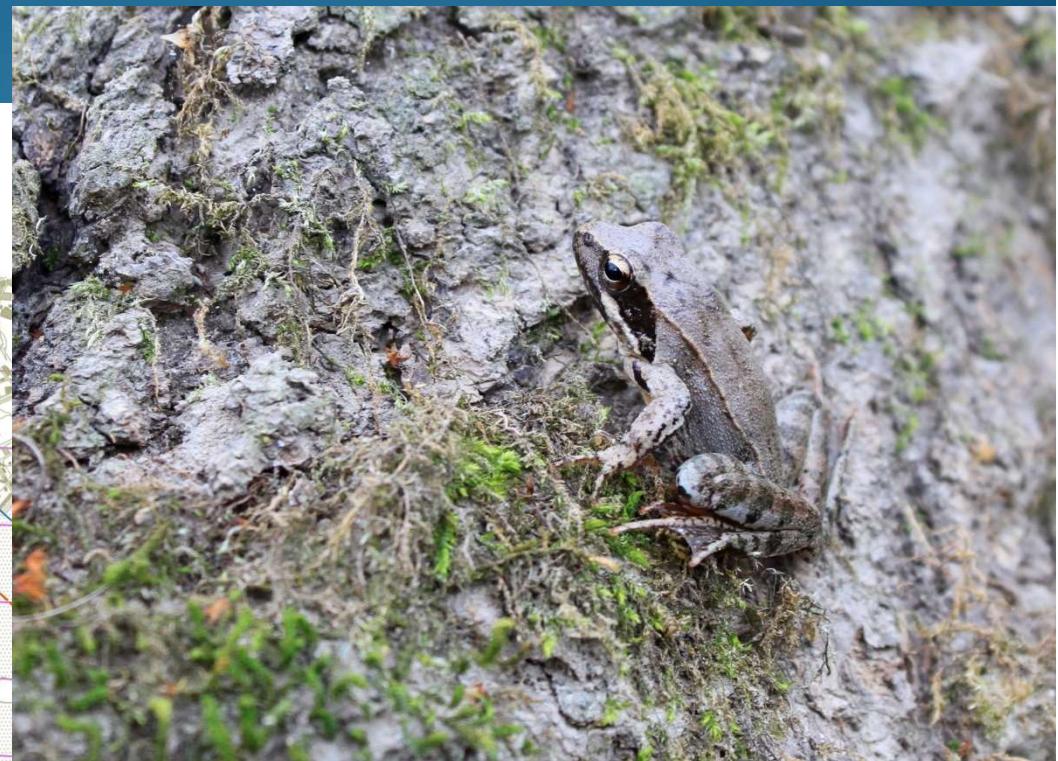
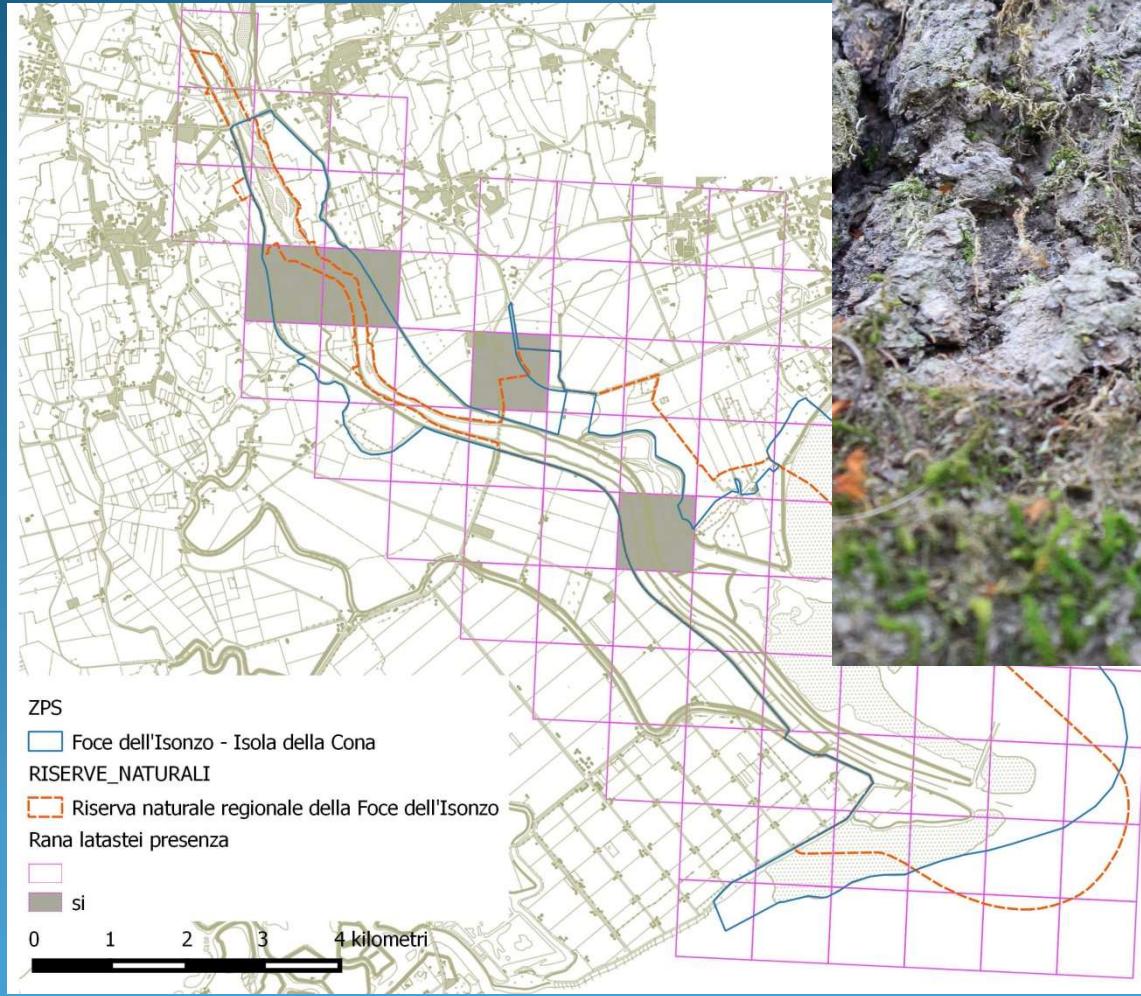
## *Monitoring of species listed in Habitat Directive:*

- Fish : *Aphanius fasciatus*, *Knipowitschia panizzae*, *Pomatoschistus canestrini*



## *Monitoring of species listed in Habitat Directive:*

- Amphibians and reptiles

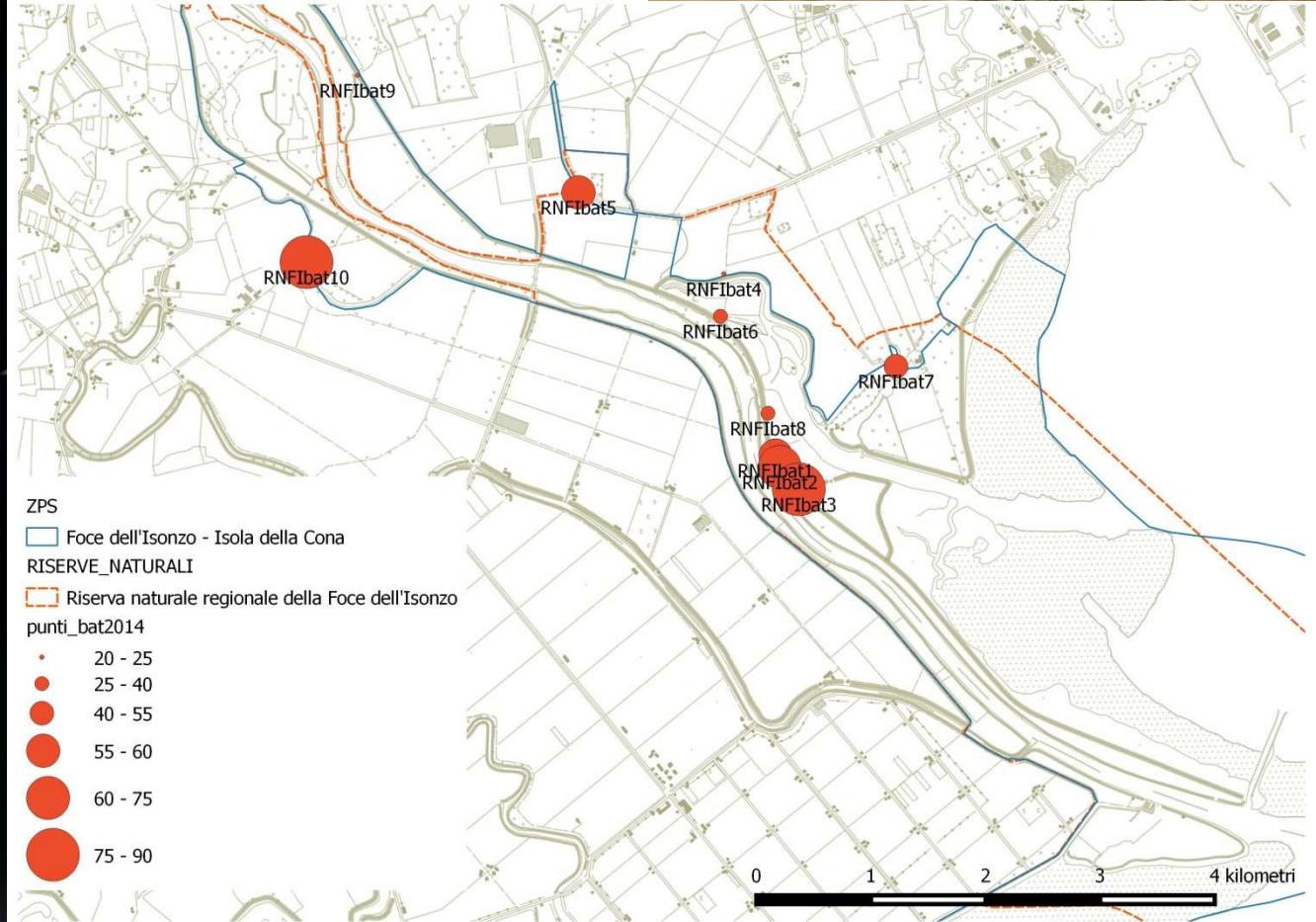


## *Monitoring of species listed in Habitat Directive:*

- Bats



Nuove specie per ZSC:  
*H.savii*  
*P. pygmaeus*  
*Nyctalus*. Sp  
*Myotis*. Sp



## *Monitoring of species listed in Habitat Directive:*

- *Canis aureus*, *Felis silvastris*, *Mustela putorius*



## *Other activities:*

- Ring observation and recording

	Numero anelli/collari letti	
	2014	2015
Oca selvatica	5	11
Cigno reale	3	2
Airone bianco maggiore	4	1
Spatola	11	6
Cormorano	1	1
Marangone dal ciuffo	4	2
Cavaliere d'Italia	7	7
Fratino	1	1
Combattente	1	
Piovanello pancianera	8	3
Gabbiano comune	18	24
Gabbiano corallino	26	22
Gabbiano reale	1	2
Sterna comune	6	24
Beccapesci	66	63
<b>Totale</b>	<b>172</b>	<b>169</b>



## *Other activities:*

- Cooperation with different University



## Other activities:

- Cooperation with different University

*Turk. J. Fish. & Aquat. Sci.* 20(4), xx-xx  
[http://doi.org/10.4194/1303-2712-v20\\_4\\_04](http://doi.org/10.4194/1303-2712-v20_4_04)

EARLY VIEW  
RESEARCH PAPER



*Turkish Journal of  
FISHERIES and  
AQUATIC SCIENCES*

**Distribution and Biology of *Aphanius fasciatus* (Actinopterygii, Cyprinodontidae) in The Isonzo River Mouth (Friuli Venezia Giulia, Northeast Italy)**

Marco Bertoli<sup>1</sup>, Piero G. Julianini<sup>1</sup>, Jessica Chiti<sup>1</sup>, Matteo De Luca<sup>2</sup>, Paolo Pastorino<sup>1,3</sup>, Marino Prearo<sup>3</sup>, Elisabetta Pizzul<sup>1,\*</sup> 

<sup>1</sup>Life Science Department, University of Trieste, Via Giorgieri 10, 34127 Trieste, Italy.  
<sup>2</sup>Natural Regional Reserve of the Isonzo River Mouth, Cona, 34079 Staranzano (Gorizia), Italy.  
<sup>3</sup>Experimental Zooprofilactic Institute of Piedmont, Liguria and Valle d'Aosta, Via Bologna 148, 10154 Torino, Italy.

*script*



UNIVERSITÀ DEGLI STUDI DI TRIESTE

Corso di Laurea Magistrale in  
ECOLOGIA DEI CAMBIAMENTI GLOBALI

DIPARTIMENTO DI SCIENZE DELLA VITA

Investigations on the ecology and the biology of three species of gobies (Teleostei, Gobiidae) in the Natural Reserve of the Isonzo River Mouth (Friuli-Venezia Giulia, North-East Italy)

Relatore: Prof.ssa Elisabetta Pizzul  
Correlatore: Dott. Marco Bertoli  
Correlatore: Dott. Matteo De Luca  
Correlatore: Prof. Piero Franzoi

Studente:  
Irene Piccolo

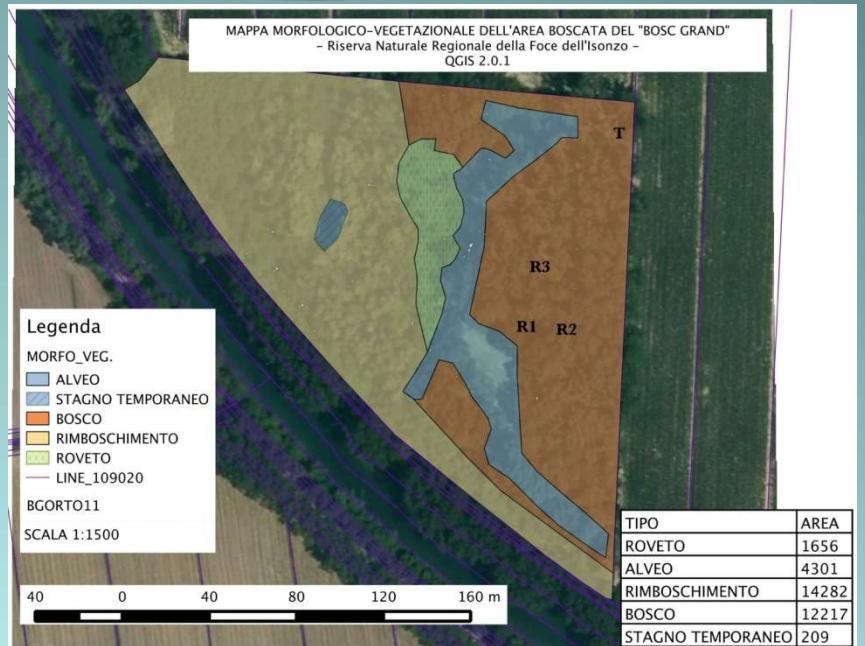
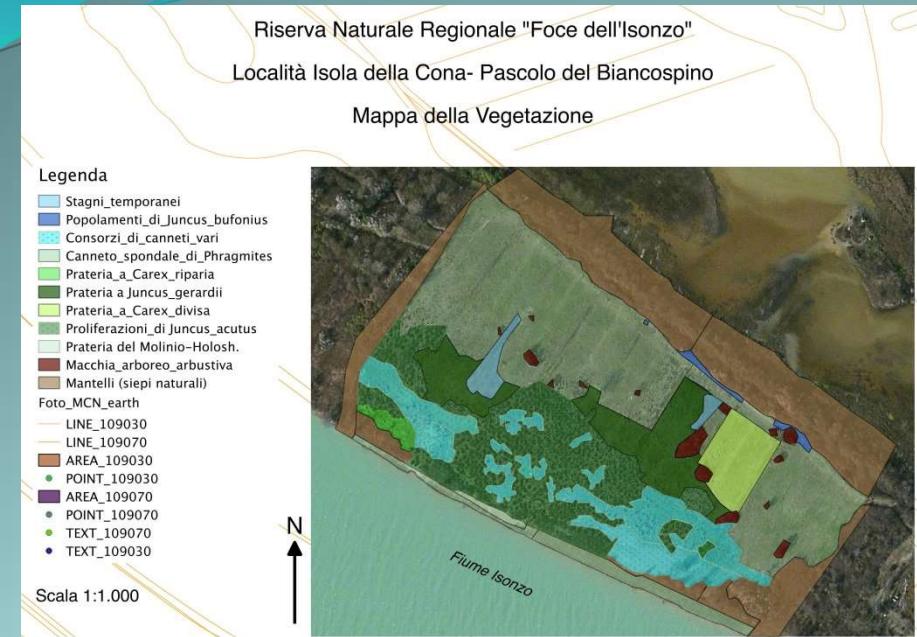
Anno Accademico 2019-2020

## *Flora and vegetation monitoring*

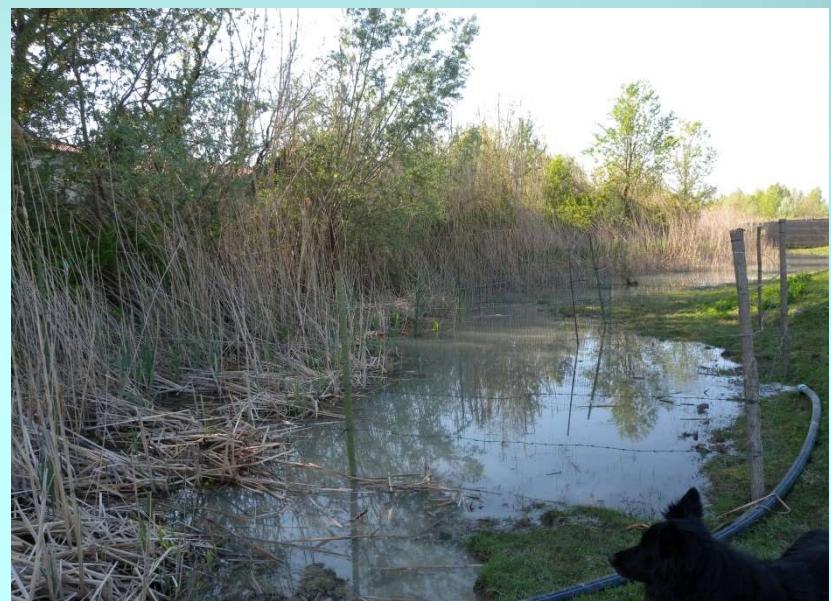
# **Flora check-list and vegetation analysis**

Praterie umide ruderale dulciacquicole ( <u>Potentillo-Polygonetalia</u> ) con megaforbie ( <u>Filipendulo-Convolutea</u> )				
Specie	Copertura		Optimum Fitosociologico	Foto
	1	2		
<i>Althaea officinalis</i>	3	+	<u>Filipendulo-Convolutea</u>	
<i>Eupatorium cannabinum</i>	2	+	<u>Convolutea sepium</u>	
<i>Aster novi-belgi</i>	3	3	<u>Convolutum sepium</u>	
<u><i>Calystegia sepium</i></u>	1		<u>Convolutum sepium</u>	
<i>Lysimachia vulgaris</i>		+	<u>Filipendulo-Convolutea</u>	
<i>Cirsium canum</i>		+	<u>Molinietalia caeruleae</u>	
<i>Allium suaveolens</i>	2		<u>Molinion caeruleae</u>	
<i>Tetragonolobus maritimus</i>	1		<u>Molinion caeruleae</u>	
<u><i>Linum maritimum</i></u>		+	<u>Molinio-Holoschoenion</u>	
<i>Pulicaria dysenterica</i>	2	+	<u>Potentillo-Polygonetalia</u>	
<i>Festuca arundinacea/arundinacea</i>		1	<u>Potentillo-Polygonetalia</u>	
<i>Plantago major/intermedia</i>	+		<u>Alchemillo-Ranunculion repens</u>	
<i>Potentilla reptans</i>	+		<u>Potentillion anserinac</u>	
<i>Dactylis glomerata</i>		+	<u>Molinio-Arrheoacretica</u>	
<i>Juncus acutus/curvus</i>	+		<u>Juncetalia maritim</u>	
<i>Juncus maritimus</i>	+		<u>Juncetalia maritim</u>	
<i>Plantago cornuti</i>	1		<u>Juncetalia maritim</u>	
<i>Sonchus maritimus</i>	1		<u>Plantaginion crassifoliac</u>	
<u><i>Elymus athericus</i></u>	1	3	<u>Brachypodietalia phoenicoidis</u>	
<i>Inula viscosa</i>	+	+	<u>Lycop-Stipetca</u>	
<i>Phragmites australis</i>	3	1	<u>Phragmito-Magnocaricetea</u>	
<u><i>Peucedanum venetum</i></u>	+		<u>Geranion sanguinei</u>	
<i>Amorpha fruticosa</i>	+	+	<u>Salicion incanae</u>	
<i>Aster squamatus</i>		+	<u>Stellarietalia mediae</u>	
<u><i>Equisetum ramosissimum</i></u>	+		<u>Epilobion fleischeri</u>	
<u><i>Prenanthes purpurea</i></u>	+	+	<u>Fagellalia purpureae</u>	
<i>Prunus spinosa/spinosa</i> plantule		+	<u>Prunellalia spinosae</u>	
Commento	Praterie umide delle superfici più elevate e dissalate, un tempo fortemente invase da Amorpha fruticosa, specie che il pascolamento bovino degli anni scorsi ha quasi completamente eliminato, ma sempre latente in zona. Le specie prevalenti sono quelle delle praterie umide di megaforbie ( <u>Filipendulo-Convolutea</u> ), dei prati umidi acquadulcicoli ( <u>Molinietalia caeruleae</u> ) e dei prati umidi ruderale ( <u>Potentillo-Polygonetalia</u> ). Sempre presente (più o meno abbondantemente) Phragmites australis, a segnalare la natura comunque molto umida del terreno, mentre la limitata penetrazione di specie alofile (Juncus sp.pl., Plantago cornuti, ecc.) è spiegata dalla dominanza di tali specie su superfici limitrofe più basse.			
Manuale Habitat FVG	Codice habitat: OB4 Denominazione: Vegetazioni lianose lungo i corsi d'acqua Sintassonomia: <u>Convolutea sepium</u> R. Tx. 1950 em. Mucina 1993 Habitat N2000: 6430 - Orti igrofili ad alte erbe planiziali e dei piani montano ed alpino			
Specie rilevanti	<i>Allium suaveolens</i> , <i>Cirsium canum</i> , <i>Plantago cornuti</i>			

# Habitats maps for management purpose



## Permanent areas in woodland and marshes

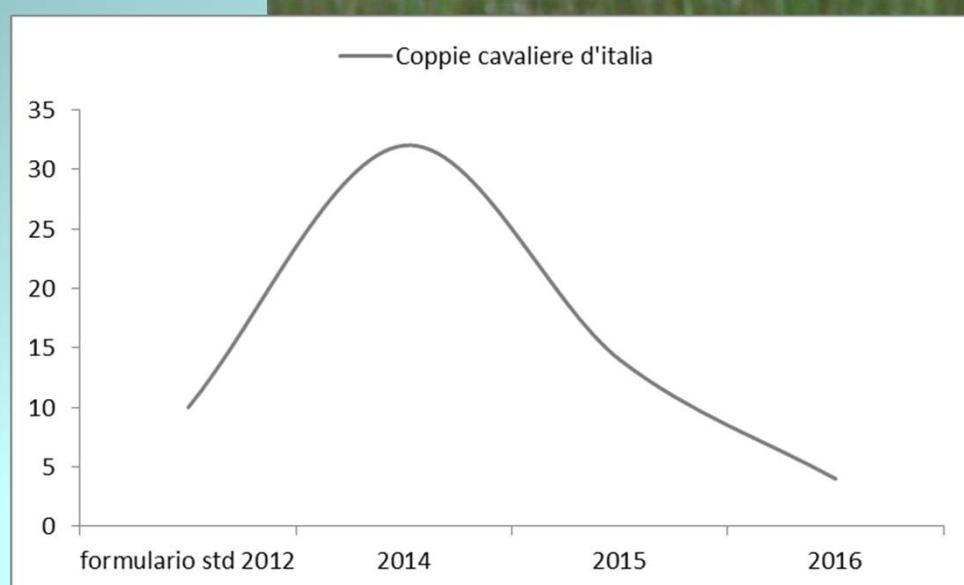
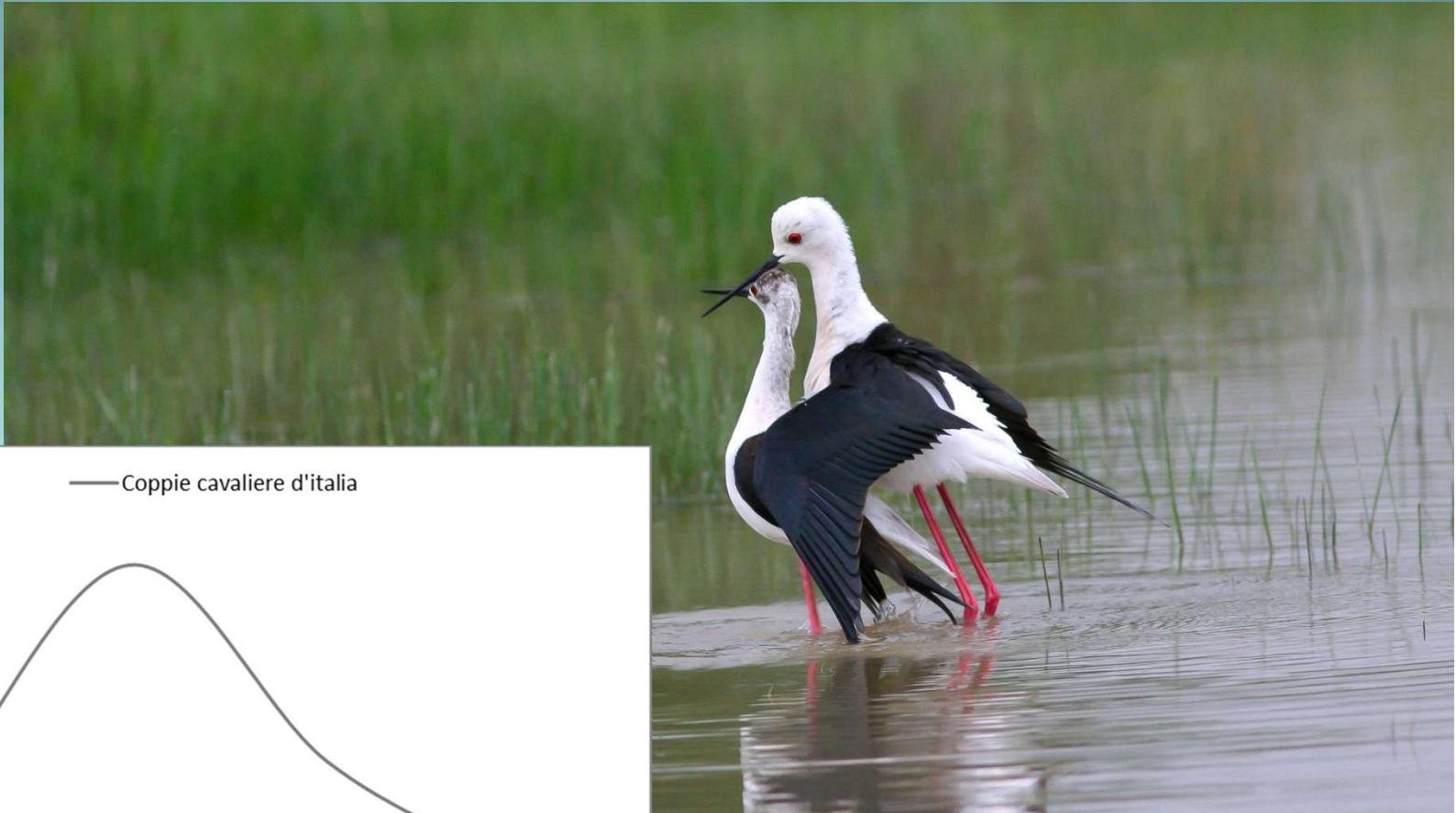


# Management



## Actions for some species

*Es. Himantopus himantopus*



# Actions for some species

*Es. Himantopus himantopus*



# Actions for some species

*Es. Himantopus himantopus*



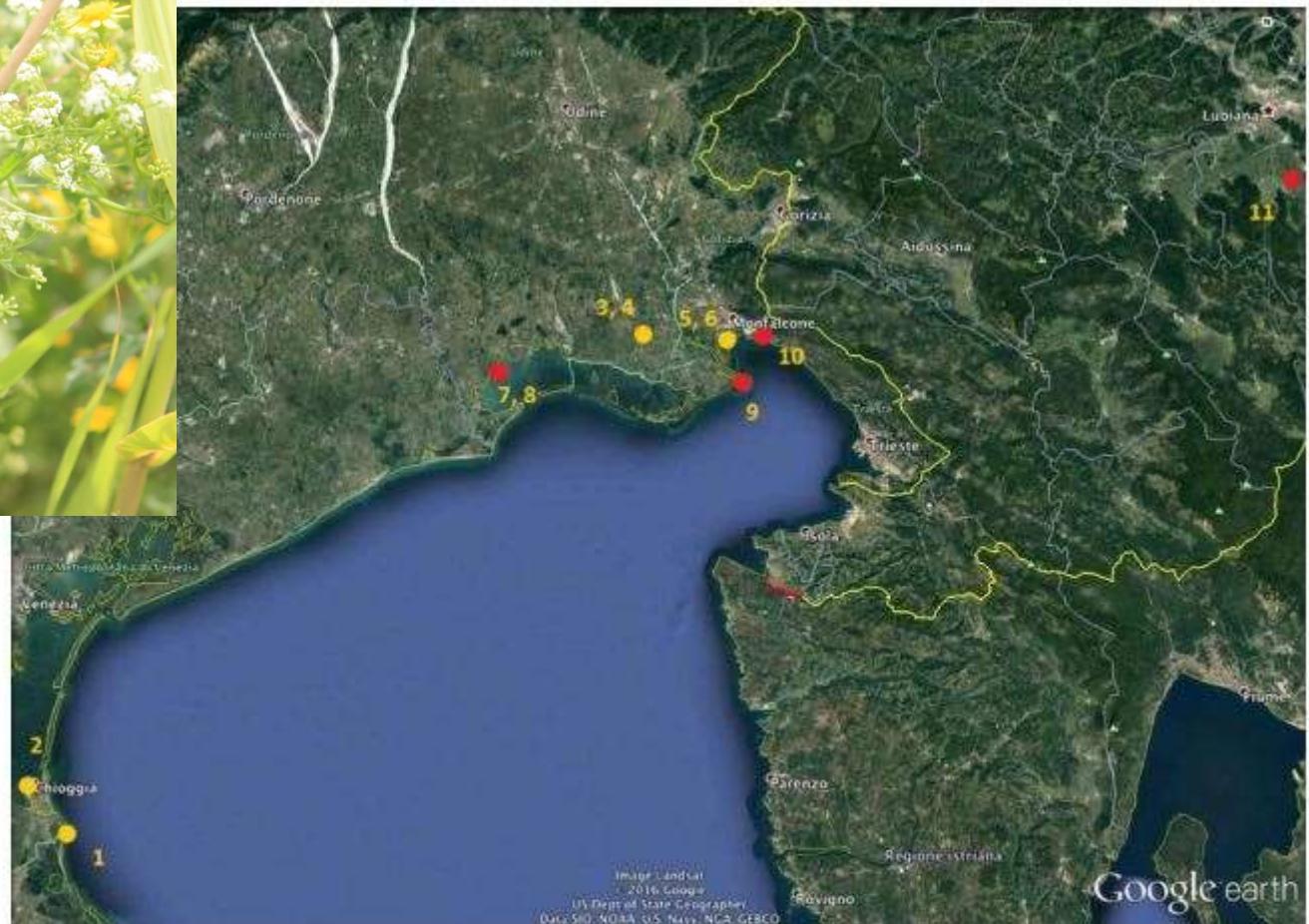
# Actions for some species

*Es. Himantopus himantopus*



## Actions for some species

*Zeuneriana marmorata*



### Localities of *Zeuneriana marmorata*

Historical localities 1. Mouth of the Adige (Kleukers et al. 1997). 2. Chioggia (Brunner von Wattenwyl 1882). 3. Aquileia Giordani Soika 1949; Kleukers et al. 1997). 4. Terzo d'Aquileia (Kleukers et al. 1997). 5. Monfalcone (Kleukers et al. 1997). 6. Bistrigna (Kleukers et al. 1997).

Current localities 7. Cormor River- Rio Muzzanella. 8. Delta of the Stella. 9. Mouth of the Isonzo. 10. Lisert, Monfalcone (Kleukers et al. 1997). 11. Ljubljansko barje (Gomboc & Šegula 2005).

# Actions for some species

*Zeuneriana marmorata*

## Adriatic Marbled Bush-Cricket (*Zeuneriana marmorata*)

A National Action Plan for Italy 2016-2022

Edited by Axel Hochkirch, Francesca Tami, Yannick Faîn, Carlo Duzan, Pierpaolo Merluzzi & Paul Tönti



### Actions' detail sheets

Actions	Who	When	How	Budget (€)	Indicator of success
<b>Goal 1: Habitat management</b>					
<b>OBJECTIVE 1.1 HABITAT PRESERVATION AND IMPROVEMENT</b>					
1.1.1 Facilitate the protection of the habitat in the Lisert area as a "Biotope"	Region, Monfalcone Municipality, S. Saffer, P. Tout	2018		NA	Lisert wetland is "Biotope"
1.1.2 Identify land owners in Lisert area	S. Saffer, P. Tout	End 2017	Land Register, interviews	NA	List of land owners
1.1.3 Explore possibilities to close sluice(s) in the Lisert area to increase water level and facilitate restoration	SBIC	2017	Dialogues with authorities	Staff time	Solution presented by 2017 to close sluice(s) by 2020
1.1.4 Monitor shrub development in Lisert area to check if shrub removal has to be done	SBIC	yearly report	Field surveys	Staff time	Yearly short report (or map), first scrub invasion map in 2017
1.1.5 Prevent the area Spigola from grazing by putting fences	SBIC	End 2017	Field	Staff time, 1,000 for material	Fence built
1.1.6 Ensure the inclusion of	Region	2017		Staff time	Management



ASTORE  
[www.astoretag.org](http://www.astoretag.org)



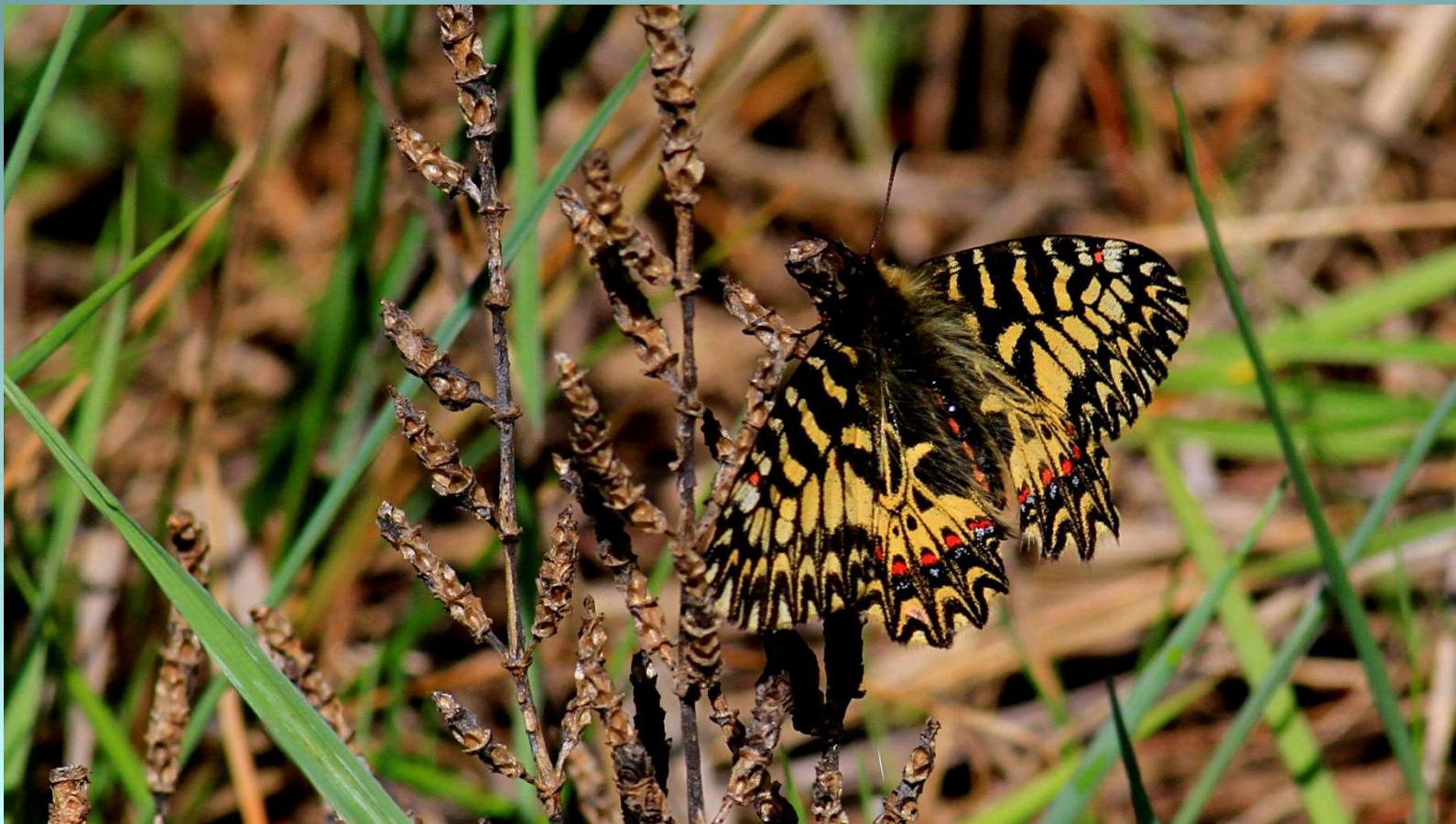
## Actions for some species

*Zeuneriana marmorata*



## Actions for some species

*Zerynthia polyxena*



## **Actions for some species**

*Zerynthia polyxena (Aristolochia rotunda)*

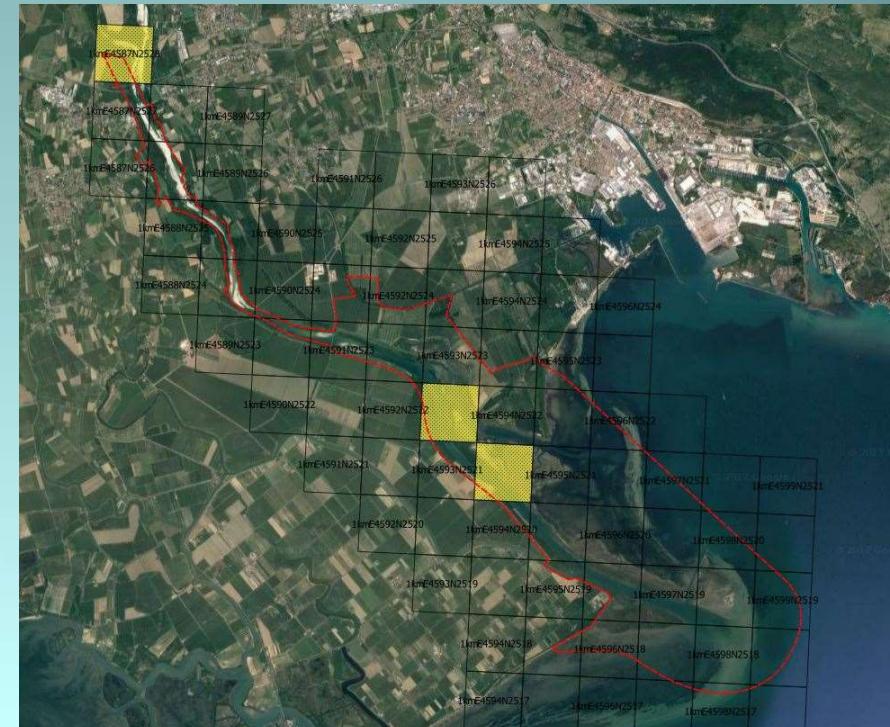


## Actions for some species

*Zerynthia polyxena*



**Ante 2016**



**Post 2016**

## **Actions for some habitats of species**

### **Restoring reedbeds**

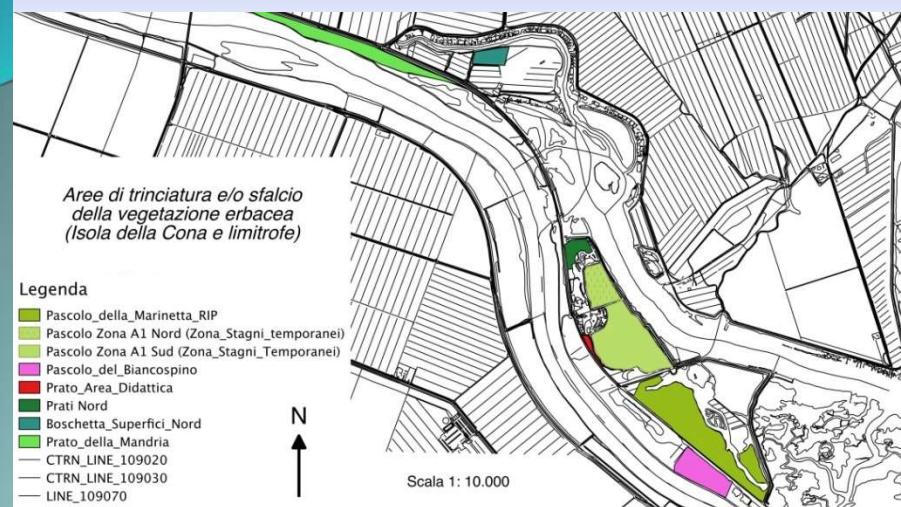


## Actions for some habitats of species

*Diversification of flood bed vegetation through  
Horses grazing*



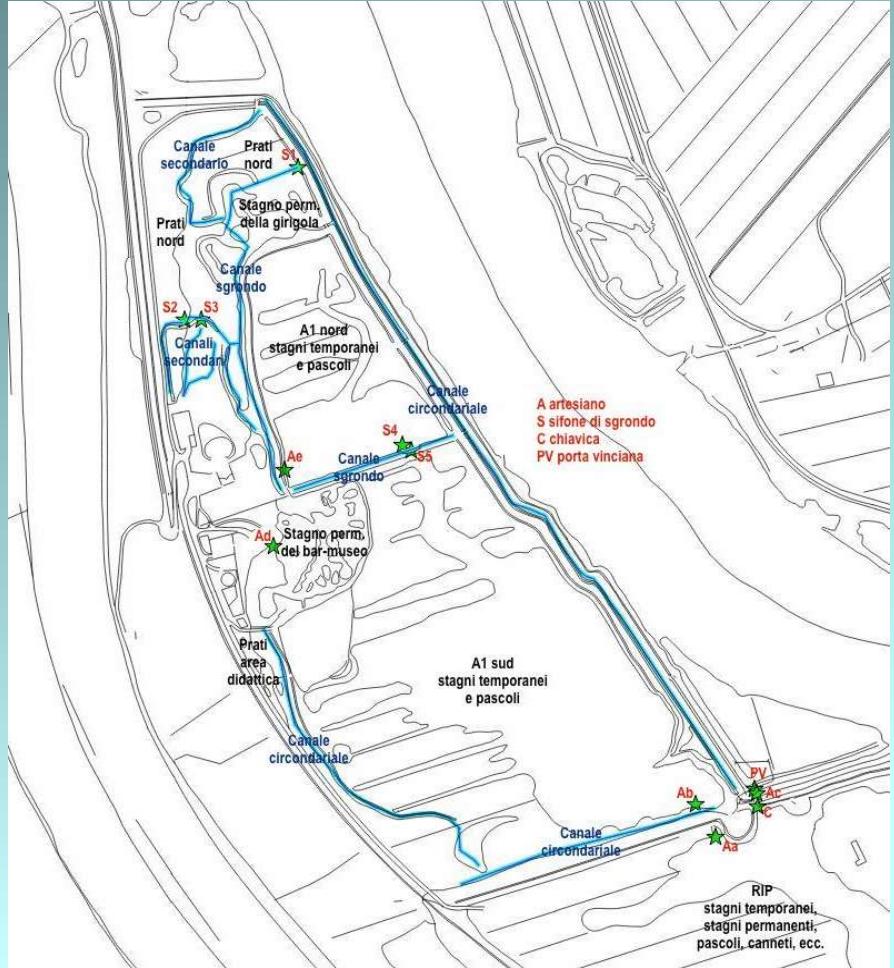
## Management of meadows



- Grazing
- Mowing



# Management of water level: flooding and draining.



## Stakeholders....



## Stakeholders....



**Stakeholders....**



## **Stakeholders....**



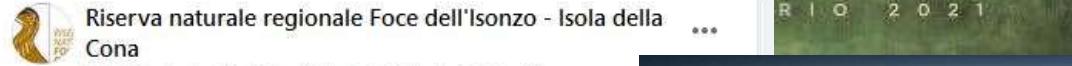
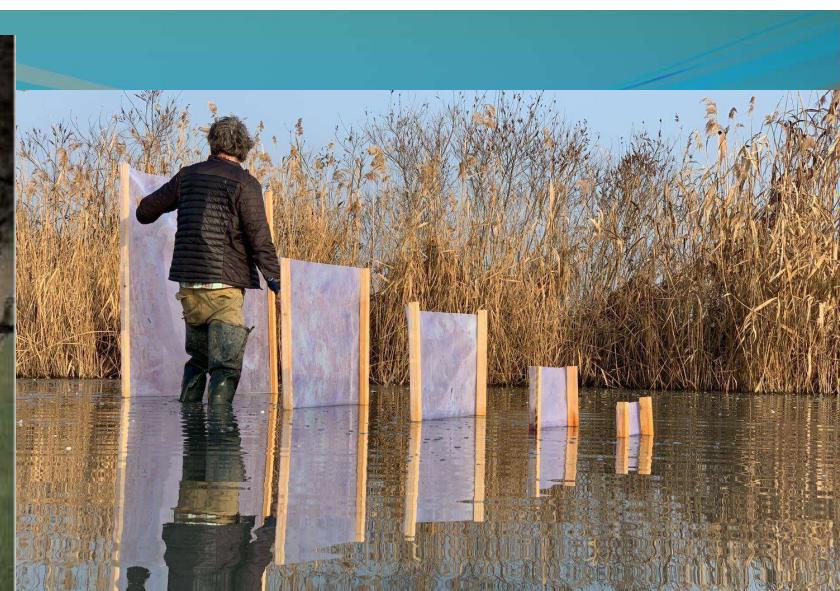
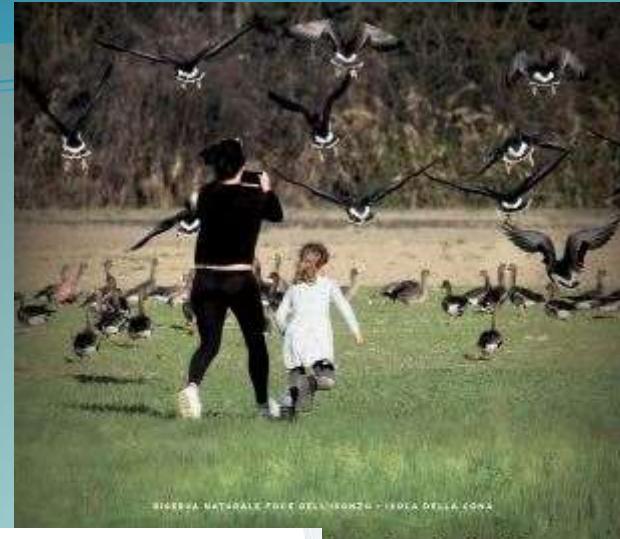
## Stakeholders....



## Stakeholders....



# Communication



Pubblicato da Tina Klanjšček · 23 luglio 2020 ·

Ritorniamo alla #Natura! Dal Coordinamento aree naturali prodotto della Regione Friuli Venezia Giulia nasce l'idea di realizzare dei promozionali per pubblicizzare e rilanciare i #parchi e le #riserve regionali. Tra queste vi è anche la Riserva naturale regionale Foce dell'Isonzo - Isola della Cona, nota in tutta Italia per la straordinaria #biodiversità che ospita, grazie al suo mosaico di praterie, boschi, acque dolci e salate. Un #gioiello da visitare in tutte le stagioni!



12.821  
Persone raggiunte

970  
Interazioni

Metti in evidenza il post



**Thank you!**