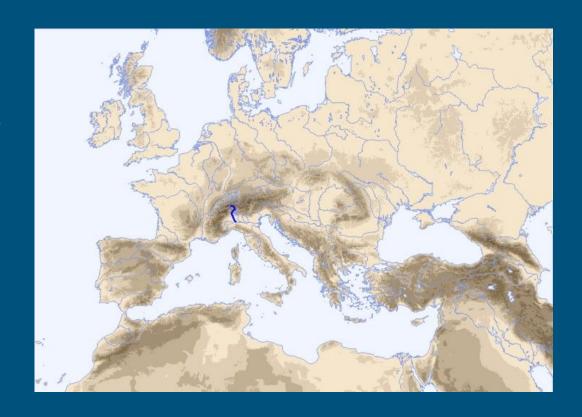


## TICINO PARK

#### RIVER TICINO

River Ticino originates in the Alps. It then flows through the Swiss canton of Ticino and northern Italy. It is 270 km long. In Italy, it is mainly used for irrigation. River Ticino flows through Lake Maggiore and it joins river Ponear Pavia.



#### PARK IDENTITY CARD

LAND AND SURFACE AREA (ha): 91.800,00

**REGION: Lombardy** 

PROVINCES: Milan, Pavia, Varese

MUNICIPALITIES: Vigevano, Abbiategrasso, Bereguardo, Cassolnovo, Gambolò, Garlasco, Golasecca, Gropello Cairoli, Morimondo, Pavia, and other 36.

PARK AUTHORITIES: Parco Lombardo della Valle del Ticino

Ticino Park is a green area of extraordinary quality. It became one of the biggest river parks in Europe in January 1974.

Ticino Park is run by an association of 47 Municipalities and 3 provinces and, since March 1980, it has been protected by an urban plan, which imposes strict limits and safeguards.



### Natural landscapes

Ticino Valley is an area characterized by a great biodiversity. There's a great variety of habitats where several species of animals and plants live:

- the river
- the woods

### Man-made landscapes

- cultivated fields
- farms
- vegetable gardens

### Sports and leisure

- water sports: canoeing, soft rafting....
- trekking

#### **FAUNA**

#### Ticino Park is home to a lot of animal species:

- FISH: carp, trout, eel, catfish, pike, tench, bleak;
- **MAMMALS**: otter, fox, hedgehog, mole, shrew, hare, bat, rabbit, squirrel, dormouse, mouse, weasel, marten, skunk, badger, deer, boar;
- BIRDS: heron, egret, white stork, kingfisher, duck, owl, hawk;
- **REPTILES**: grass snake, viper, coluber, lizard, green lizard, slow worm, pond turtle
- **AMPHIBIANS**: frog, toad, treefrog, salamander;
- **INSECTS AND OTHER SPECIES**: mosquito, bee, wasp, hornet, horsefly, bumblebee, spider, butterfly, dragonfly, ladybird, beetle, ant

## THE RIVER



# FISH

<u>CARP</u> are large freshwater fish which live in ponds, lakes, and rivers all over the world. They may be brownish yellow, greenish, or grey. Most types of carps have barbels at the corners of the mouth. They eat both plants and animals and live alone or in small groups.





**TROUT** are very popular fish and people eat them. They're members of the salmon family and they're found in clear streams and lakes.

**EELS** have long and narrow bodies like snakes.





**CATFISH** are named after their prominent barbels which resemble a cat's whiskers.

**PIKE** are carnivorous fish. They can grow to 70-120 cm. They get their name from a weapon known as the pike.

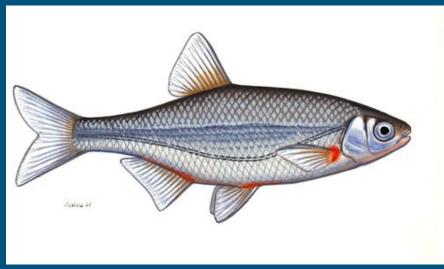




**TENCHES** are often found in still waters. They are bronze green on the back and golden green on the sides. They eat larvae, pond snails, worms and freshwater mussels.

**BLEAKS** are small freshwater fish. They eat small molluscs and insects that fall in the water, worms and small shellfish. They're an important food source for predatory fish.





## **AMPHIBIANS**

FROGS are green and small amphibians with no tail. They live part of their life in water and the other part of it on land. Frogs have strong hind legs to enable them leap forward at a great distance. The front legs or arms are short and they are used to prop the frog up when it sits. Frogs also have webbed feet for swimming. Their diet consists mainly of insects, small animals like earthworms, and spiders.





**TOADS** are characterized by dry, leathery skin and short legs. They have more terrestrial habitats than frogs.

A **TREE FROG** is a species of frogs which spends most of its time on trees.





**SALAMANDERS** have a lizard-like appearance. They can regenerate lost limbs and other parts of their body.



## THE WOODS



# MAMMALS



WILD BOARS are close relatives of the domestic pig. Their body is covered with a double coat of fur that can be brown, red, black or grey. They eat seeds, fruits, leaves, berries, acorns, eggs, mice, lizards, worms and snakes.





DEER are included in the 'Cervidae' family of animals. Male deer grow antlers every year. The antlers fall off in the winter. Deer have the ability to jump quite high and they are also quite excellent swimmers. They're herbivorous.





BADGERS are nocturnal mammals with short legs they use for digging underground tunnels and chambers where they sleep. Badgers have a black and white face and small ears. Their fur is grey, black and white. They eat earthworms, insects, bulbs and berries.

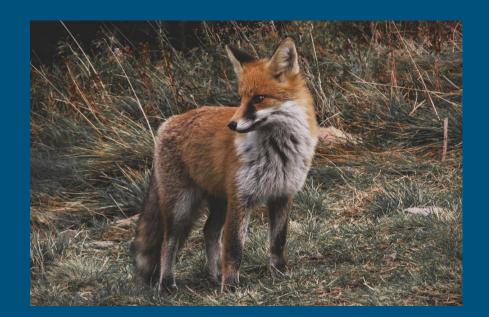
**OTTERS** generally live along rivers. They prefer water bordered by woods or wetlands, such as marshes. They can stay underwater for some minutes. When they dive, they close their ears and nostrils to keep water out. They hunt fish underwater. Flexing their long bodies up and down, paddling with their webbed hind feet, and using their feet and strong tails to steer, river otters are underwater acrobats.





**FOXES** live in wooded areas and farmland. They have a reddish coat that is white underneath and a big bushy tail with a white tip. Foxes live in family groups. They are usually active at night. During the day, they rest. They have excellent vision, and keen senses of smell and hearing. They can make 28 different types of calls to communicate with each other!

Their diet includes fruits, berries and grass. They also eat birds and small mammals like squirrels, rabbits and mice. A large part of their diet is made up of crickets, caterpillars, grasshoppers, beetles and crayfish.







**SQUIRRELLS** are rodents. Most squirrels are small and have big eyes and bushy tails. Their large eyes help them skilfully climb trees and avoid predators. They eat mostly nuts, fruits and seeds. Baby squirrels are blind.



**HEDGEHOGS** have spines everywhere except on their face, legs, and bellies. When they're in danger, they curl into a ball to protect the parts of their body that do not have sharp spines. When hedgehogs are born, their spines are soft and short. Soon after birth, their spines grow harder, sharper, and longer. They eat insects, small mice, snails, lizards, frogs, eggs and even snakes.





**MOLES** look like mice or squirrels, but they aren't rodents. They're digging animals that eat bugs, worms, ants and spiders. People usually don't like them because they dig holes and tunnels in their gardens. They're usually brownish grey to black.





**SHREWS** look like rats but they aren't rodents. They're related to moles. They have a long, narrow body, a small head and a pointed snout. Like moles, shrews love to eat insects. They also eat small mice and lizards. Some shrews are aquatic and live in or near the water. Their feet have hairs that trap bubbles. These shrews can glide across the water.



**RABBITS** are mammals that belong to the order that also includes hares. People think they're rodents because they have incisor teeth that continually grow, but they aren't. A male rabbit is called **buck** and a female one is called **doe**. A baby rabbit is called a **kitten** or a kit. Rabbits are herbivores (plant eating) mammals. They eat vegetables, tree bark and herbs. Rabbits are social, loving and interactive animals. They live in groups in a home called a warren. The average lifespan of a rabbit is between 8 to 10 years.



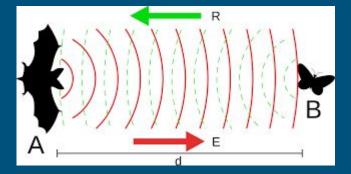


Many people think that <u>HARES</u> are rabbits, but they aren't. They're relatives of the rabbit but they are different. Hares are a type of rodent. They are larger than rabbits, they are fast and have long ears, long hind legs, a furry coat as well as a shorter tail.



BATS are nocturnal flying mammals. They 'see' in the dark using a special skill called <u>echolocation</u>. They make noises and wait for the sound waves to bounce back off objects (an echo), if it doesn't bounce back then they can safely fly forward. They can tell the distance of various objects by how quickly the sound waves bounce back to them. Most bats feed on insects, while others eat fruit, fish or even blood!





## REPTILES



VIPERS are venomous snakes.



**GRASS SNAKES** are often found near the water and eat amphibians.

COLUBERS are thin and fast snakes.





There are over 6,000 species of LIZARDS in the world.

GREEN LIZARDS are large lizards often seen sunning on rocks, in the grass or sheltering among bushes.





SLOW WORMS are typical grey-brown snakes. They're slow-moving and you can easily catch them.

# **POND TURTLES** are a long-living freshwater species of turtles.



# INSECTS

MOSQUITOS are insects which feed on men's and animals' blood. They're very common in Ticino Park because they proliferate in water.





BEES are flying insects which produce honey and beeswax.

WASPS are fierce predators and they hunt and eat almost every insect that harms crops. Wasps eat grasshoppers, aphids, flies and other bees.





HORNETS are wasps which construct hives by chewing wood into a papery construction pulp. HORSEFLIES are flies with a black body, and long, clear wings. Males and females of this species look different.





BUMBLEBEES are social insects which form colonies with a single queen.

**SPIDERS** belong to a group of animals called 'arachnids'. They have got two body segments, eight legs, no wings or antennae and are not able to chew. They can make silk which they use to spin elaborate spiderwebs. Spiderwebs are used to catch food.





<u>BUTTERFLIES</u> have brightly coloured wings. Their lifecycle is made up of four parts: egg, larva (caterpillars), pupa (chrysalis) and adult.

<u>DRAGONFLIES</u> are characterized by large multifaceted eyes, two pairs of strong transparent wings, and a long thin body.





LADYBIRDS can be yellow, orange, or red with small black spots on their wings, with black legs, heads and antennae.

BEETLES have got two pairs of wings.

To avoid being attacked by predators, beetles have many strategies such as camouflage, toxic properties, and fighting defences.





ANTS are social insects. It's estimated that the total number of ants alive in the world at any one is between one and ten quadrillion (10,000,000,000,000,000).

## BIRDS

## **GARZAIAS**

GARZAIAS are wet areas along the river bed. The preservation of residual alder and willow groves is necessary to the nidification of the HERONS.



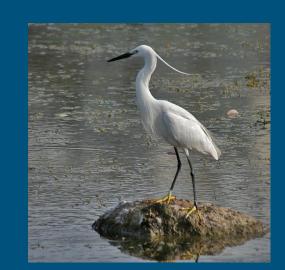
## **HERONS**

HERONS are large sized birds with long legs and necks. It's really easy to see them if you go around Ticino Park.



#### **GREY HERON**

LITTLE EGRET





WHITE STORKS are large birds with long red legs and a long pointed red beak. Their feathers are black and white. Legends say that the stork is responsible for bringing babies to new parents.



KINGFISHERS have got a short tail and a large head and they eat fish which they catch by diving underwater.





DUCKS are very common fresh and seawater birds which eat grass, aquatic plants, fish, insects, small amphibians, worms and small molluscs.

OWLS are solitary and nocturnal birds of prey with a large head, binocular vision and feathers adapted for silent flight. They hunt small mammals, insects and other birds.





HAWKS are diurnal birds of prey with a very sharp vision. They feed with snakes, lizards, fish, mice, rabbits, squirrels, birds and other small animals that are found on the ground.

# FLORA

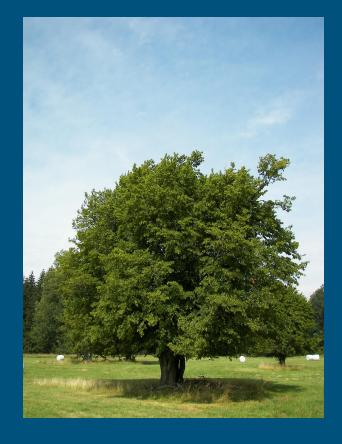
## TREES and UNDERGROWTH

There's a great variety of trees in Ticino Park. The autochthonous species are:

- downy oak (roverella) (Quercus Pubescens)
- English oak (farnia) (Quercus Robur)
- butcher's broom (pungitopo) (Ruscus Aculeatus)
- black poplar (pioppo nero) (Populus Nigra)
- manna-tree (orniello) (Fraxinus Ornus)
- elm (olmo) (Ulmus Minor)
- nut-tree (nocciolo) (Corylus Avellana)
- crab tree (melo selvatico) (Malus Sylvestris)
- parsley-leaved elder (sambuco nero) (Sambucus Nigra)
- mulberry (gelso) (Morus Nigra L.)
- ash (frassino) (Fraxinus Excelsius)
- cornel tree (corniolo) (Cornus Mas. L.)
- wild cherry (ciliegio) (Prunus Avium L.)
- white-thorn (biancospino) (Crataegus Monogyna)
- field maple (acero campestre) (Acer Campestre)
- undergrowth: ferns, bushes, mushrooms and.......flowers

## Oak (Quercus Robur)





Downy oak (Quercus Pubescens)

## Butcher's broom (Ruscus Aculeatus)



Black poplar (Populus Nigra)

## Elm (Ulmus Minor)





Manna-tree (Fraxinus Ornus)

## Nut-tree (Corylus Avellana)





Crab tree (Malus Sylvestris)

## Parsley-leaved elder (Sambucus Nigra)





Mulberry (Morus Nigra L.)

## Ash (Fraxinus Excelsius)





Cornel tree (Cornus Mas. L.)

## Wild cherry (Prunus Avium L.)





White-thorn (Crataegus Monogyna)

## Field maple (Acer Campestre)



## Mushrooms

If you want to pick them in Ticino Park, you have to get a special licence that certifies you can recognize edible mushrooms. Once you have it, you can pick mushrooms for free if you live in one of the 47 municipalities of Ticino Park; otherwise, you have to pay an annual fee.



POISONOUS MUSHROOMS





**EDIBLE MUSHROOMS** 

## FERNS



## **FLOWERS**

A very rich flora grows very close to the water: buttercups, waterlilies, bluebells and irises.

In the <u>undergrowth</u> you can find particular and rare flowers, such as primroses, narcissi, lilies of the valley, dogroses and anemoni.



## DOGROSES





## BUTTERCUPS



## WATERLILIES





## BLUEBELLS





## **IRISES**





#### PRIMROSES





## NARCISSI





## LILIES OF THE VALLEY





## **ANEMONI**





# MAN-MADE LANDSCAPES

## Agriculture

Agriculture is fundamental in Ticino Park: on a total surface of 90,000 ha, more than 50,000 ha are cultivated.

Agriculture has a great impact on the landscape of Ticino Park:

- farms
- cultivated fields
- vegetable gardens

# FARMS

# CASCINE ORSINE

# CULTIVATED FIELDS



# RICE FIELDS



**CORN FIELDS** 



**HARVEST** 

# SCHOOL VEGETABLE GARDEN

# One small vegetable garden many small gardens



## Istituto Comprensivo Viale Libertà, Vigevano The first vegetable garden...

## THE FIRST ACT, THE OLDEST: SAW!

Plant your seeds, because you never know what will grow! Maybe they will do all.
Albert Einstein







## THE LAW OF THE SEED

- Diversity: only a rich and diversified system is able to guarantee everyone to eat well.
- Freedom: we have the right and the duty to safeguard the ancient crop varieties and to create new varieties.
- The future evolution: keep the agricultural past for a better future.







#### **OUR HANDS SOW**

We **children** are sowing. Our hand is taking the seeds from the bag. Then the hand will drop them. That is an ancient gesture. All peoples in the world have made this gesture. And even today, they practice it.



## Prepare a vegetable garden is not at all easy!

A vegetable garden should be above all wanted and dreamed, and then planned to the last detail.

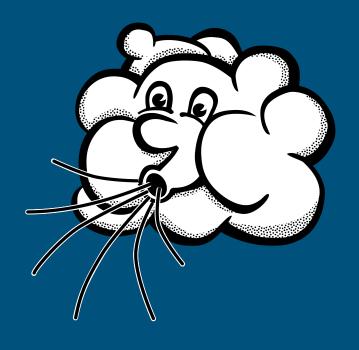






YOU HAVE TO BE CAREFUL TO....

sun exposure



... wind exposure



the available space ...





the choice of crops...

The soil is full of life. It contains most of the biodiversity of our Planet: small insects, tiny mushrooms, bacteria, other species of animals. Water and mineral salts feed plants.





A GRASSHOPPER

#### THE SOIL NEEDS WATER

At the beginning of our experience as farmers....the first problem! How can we transport water to irrigate our vegetable garden? At school we haven't got an irrigation system but only watering cans and buckets. So we carry water from the pupils' toilets to the garden using these buckets. We now understand that it is hard to practice agriculture in places in the world where there isn't an efficient water supply.



#### BETTER NOT TO CUT ALL HERBS

Too many weeds smother vegetables and flowers. However, "weeds" are also used to reduce the harmful effects of bad insects. In fact, voracious animals are distributed throughout the vegetables, and not only on the plants we grow.





OUR VEGETABLES.....

grow very quickly





FROM OUR
VEGETABLE GARDEN
TO 'CASCINE ORSINE'
(ORSINE FARM)

To grow a vegetable garden at school is an amazing experience! And then, here we are at Zelata, a beautiful estate near Bereguardo, on the right bank of Ticino river. Biodynamic farming is practiced at Cascine Orsine, founded by Giulia Maria Crespi.







# GREENHOUSES



AN
INTEGRATED
ENVIRONMENT,
NATURE AND
AGRICULTURE

Here we are at the entrance of the smell magic circle. Wonderful herbs, how many different scents!





**SAGE** 

## Istituto Comprensivo di via Anna Botto, Vigevano

## **OUR VEGETABLE GARDEN!**

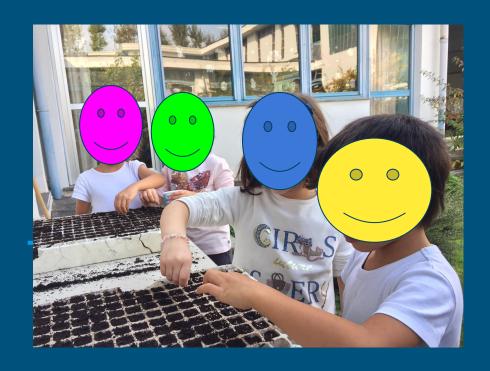
It's fall. The soil is preparing for the winter rest. But even in winter the garden can accomodate a few plants.



Our autumn vegetable is a salad: it is called Lollo (which is just a nice \_\_\_ name, easy to remember!)



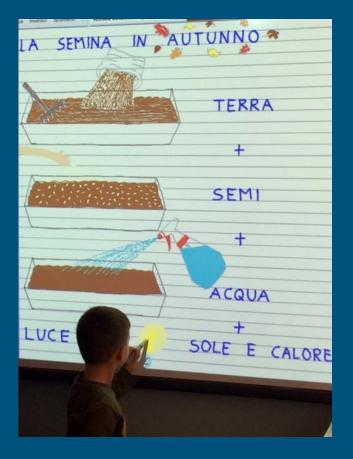
... the seedbed of lollo...



... and we tell our seedbed story drawing and writing...



## What fun! What a joy!



Water, care and lots of love!

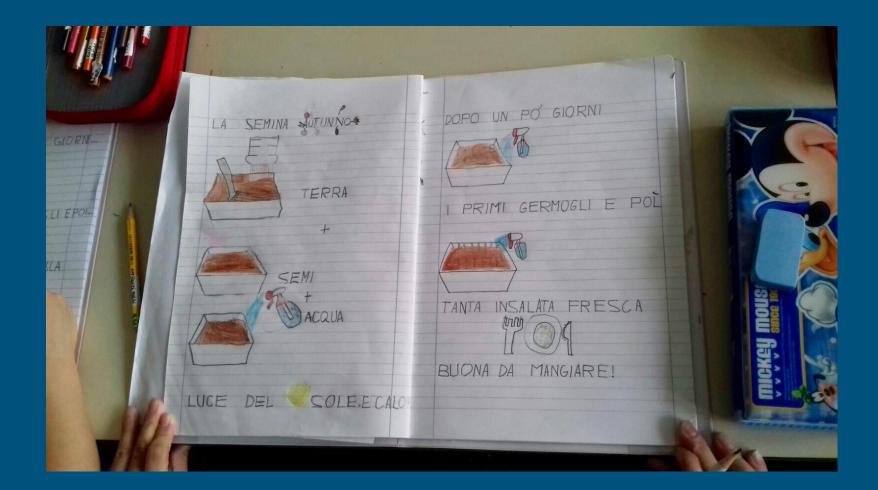


# Warmth and protection

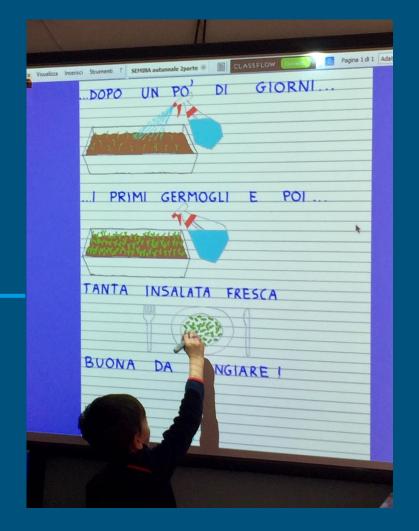


Lollo makes its way in the seedbad... it is small and tender... like us!





Lollo storytelling...



Lollo is ready to be put into a backyard ... a large vase with such soft soil...



... see you soon!!!...



# TICINO PARK...

...is sport and leisure, too

### TREKKING

Ticino Park offers a lot of paths to trekking lovers



### SOFT RAFTING

## Bibliografia

- *Ticino Park, Gli speciali di Parchi e Riserve Naturali,* Il Verde Editoriale, 2002
- Lomellina its farmhouses mills and natural oases, Amministrazione Provinciale di Pavia, 1991
- Vigevano: town of art, Assessorato al Turismo del Comune di Vigevano, levve Edizioni, 2002
- I mammiferi del Parco del Ticino, Gruppo Editoriale Fabbri

## Sitografia

- http://www.parks.it/parco.ticino.lombardo/Epar.php
- http://ente.parcoticino.it/wp-content/uploads/2015/04/Contributo-Convegn o-Monitoraggio-Ardeidi.pdf
- http://www.infolomellina.net/html/garzaie.htm
- http://kids.nationalgeographic.com/
- http://easyscienceforkids.com
- http://www.kiddyhouse.com/Themes/frogs/

\_