

QUINTA DO PISÃO I NATURE PARK

CASCAIS - PORTUGAL

LIFE URBAN GREENING PLANS

MID-TERM PROJECT MEETING 6 JUNE 2022 & PERIURBAN PARKS SYMPOSIUM 7 - 9 JUNE 2022

PARQUE FLORESTAL MONSANTO - LISBON

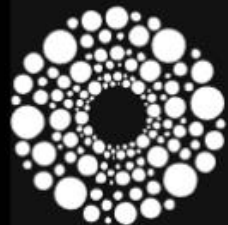
JOÃO CARDOSO DE MELO - DIRECTOR ECOLOGICAL INFRASTRUCTURE MANAGEMENT

CASCAIS



Prezi

The Charm of the Atlantic Coast



CASCAIS
AMBIENTE



CASCAIS IS A COASTAL TOWN IN PORTUGAL, 30 KILOMETERS WEST OF LISBON;

1/3 OF THE SURFACE IS COVERED BY THE SINTRA-CASCAIS NATURAL PARK AND NATURA 2000 SITE ;

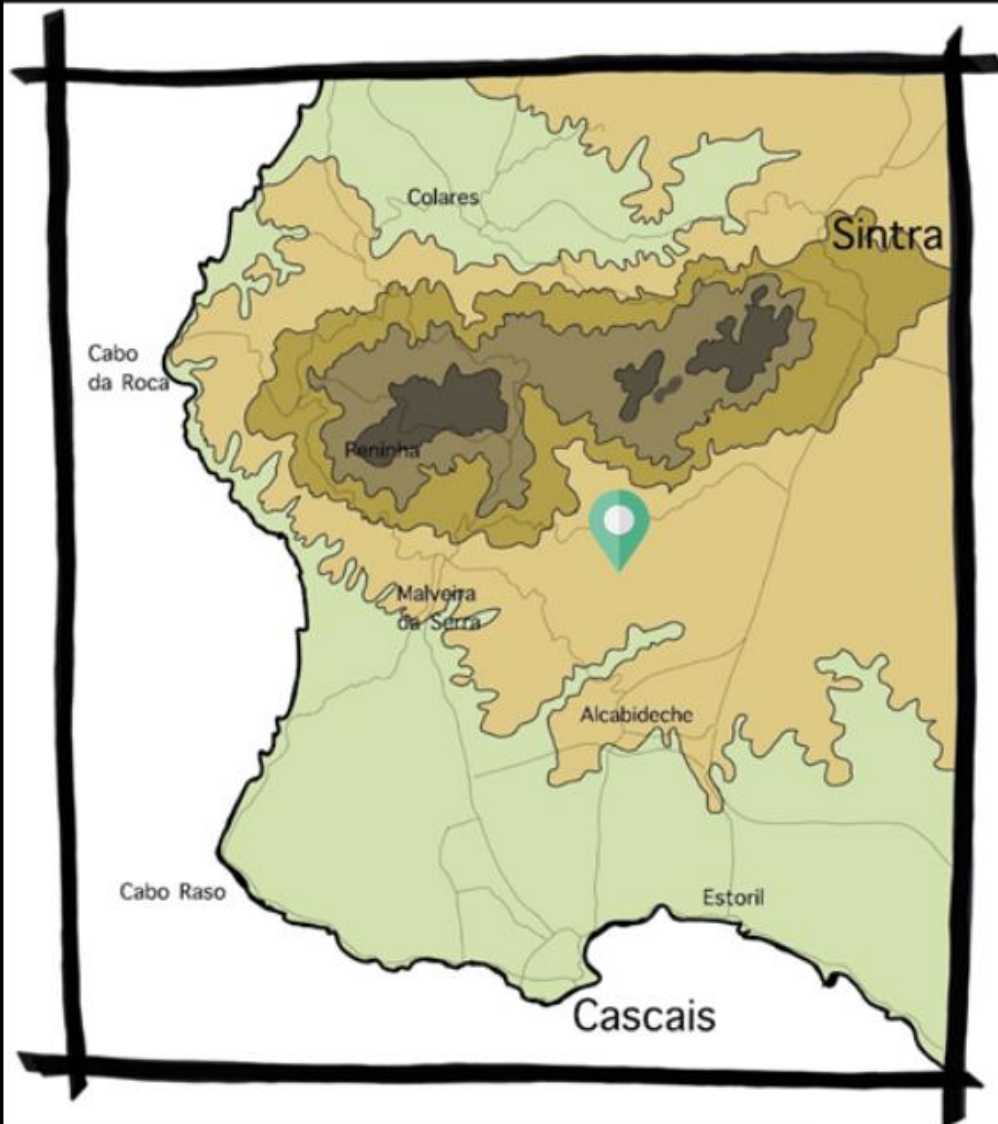
UNESCO SINTRA CULTURAL LANDSCAPE BUFFER ZONE;

210 000 INHABITANTS, WITH AN AREA 97 KM² AND 22 KM OF ATLANTIC COASTLINE;

THE PROJECT AIMS ARE TO RESTORE AN ABANDONED FARM WITH 380HA, IN AN NATURE PARK, RESTORING HABITAT AND SPECIES, OFFERING WALKING AND CYCLING PATHS, AS WELL AS A RANGE OF EVENTS BASED ON SUSTAINABLE TOURISM.



LOCAL GEOGRAPHY



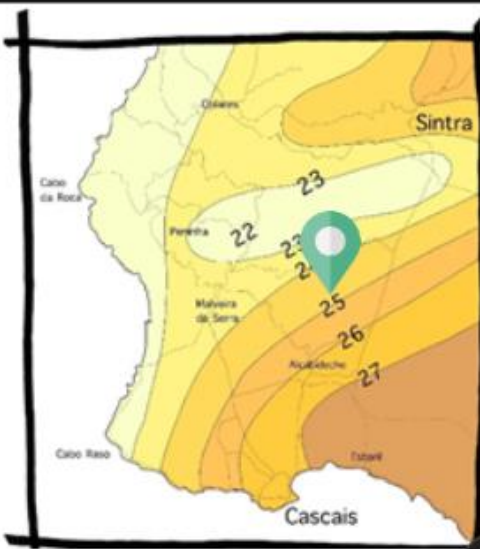
TOPOGRAPHY

WINTER TEMPERATURES

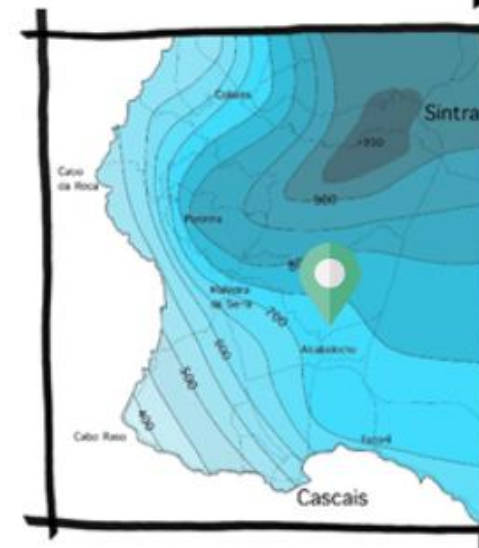


PRECIPITATION

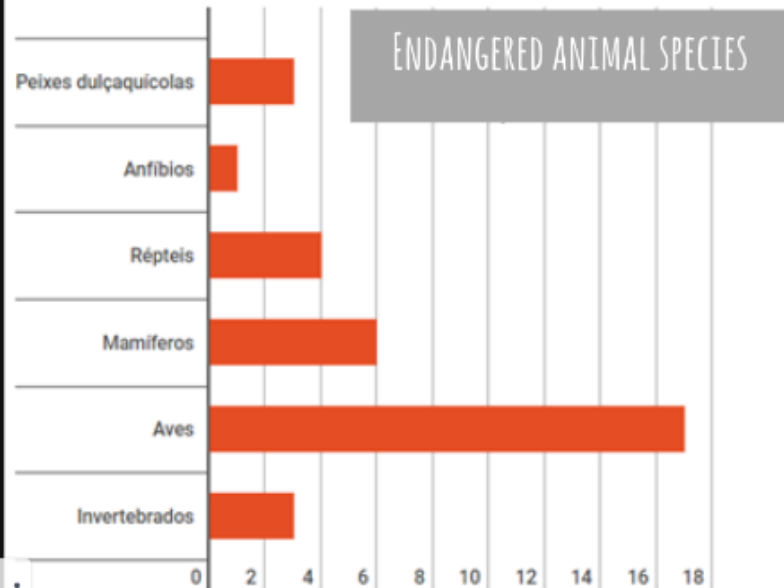
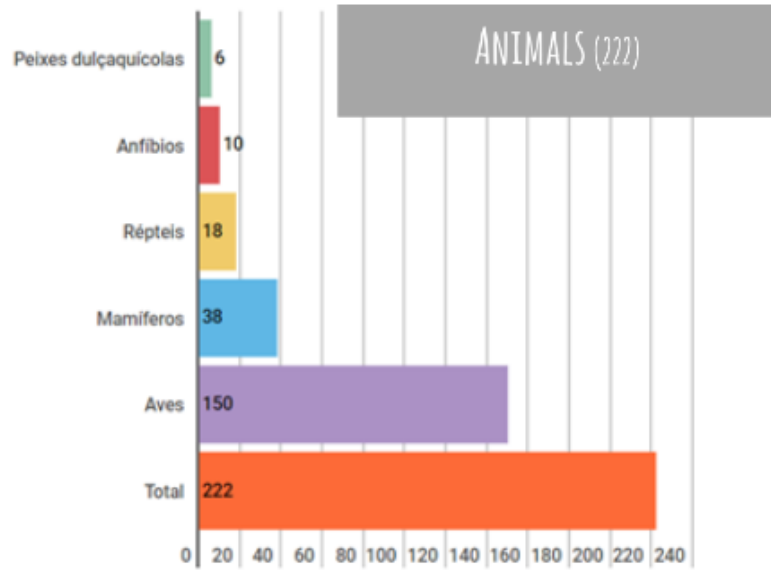
SUMMER TEMPERATURES



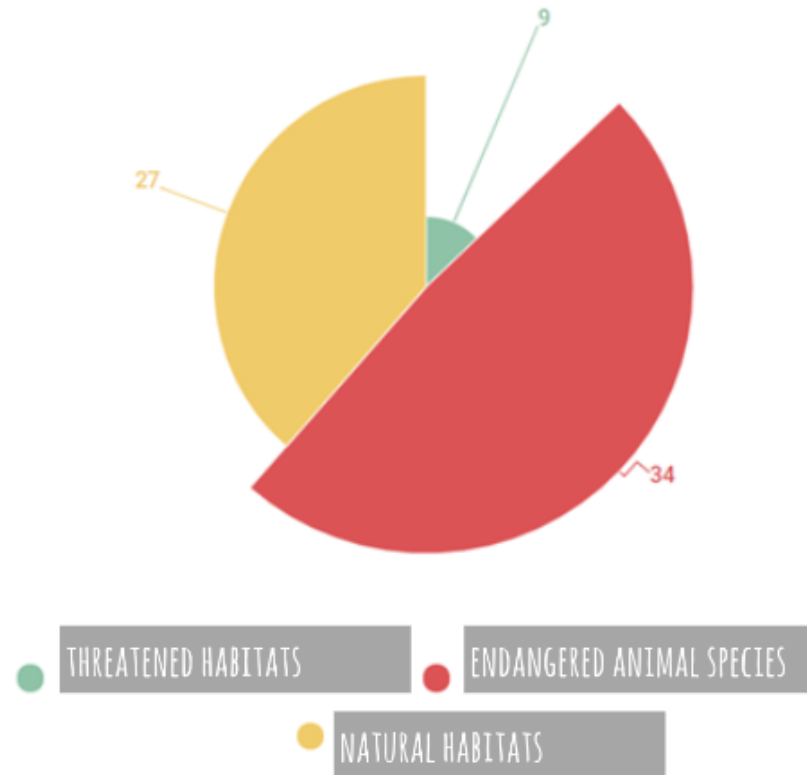
FOEHN EFFECT



FACTS AND FIGURES ABOUT HABITATS AND SPECIES



HABITAT AND CONSERVATION STATUS



A LANDSCAPE SCALE CONSERVATION PROJECT STARTED IN 2008 WITH THE OBJECTIVE TO PRESERVE THE N2000 HABITAT'S, SPECIES, THE LANDSCAPE MOSAIC AND HISTORICAL HERITAGE.

#ALSO TO REVERT THE ABANDON PROCESS, REACTIVATE THE FARM AS A "LIVING LANDSCAPE" AND TO PROMOTE THE TRANSITION FROM PERTURBAN TO NATURAL AREAS.



RESUME:

FARMING ACTIVITIES WERE REINTRODUCED, NATURAL GRAZING WITH SHEEP, DONKEYS AND HORSES, MAINTAIN MEADOWS, CONTROL THE SCRUB LAND AND PROMOTE THE LANDSCAPE MOSAIC.

IT ALSO PRODUCES AND SELLS HONEY, JAM AND VEGETABLES, ALL ORGANIC, VISITORS ARE INVITED TO “PICK YOUR OWN CROP”, N2000 PRODUCTS PROVIDED BY ECOSYSTEMS SERVICES.



FOLLOWING THE INTERVENTION, 124 SPECIES BY 11 ORDERS HAVE BEEN IDENTIFIED, INCLUDING THREE THREATENED BUTTERFLIES (NYMHALIS POLYCHLOROS, POLYOMMATUS BELLARGUS AND ZERYNTHIA RUMINA) AND ONE IN DANGER OF EXTINCTION (TOMARES BALLUS), SUGGESTING AN INCREASE IN BIODIVERSITY AND IMPROVEMENT IN MANAGING THE SITE.

THE MAIN CONSERVATION ACTIONS ARE NATURAL GRAZING, CONTROLLING INVASIVE SPECIES, CONVERSION OF FOREST PATCHES OF PINES AND EUCALYPT IN NATIVE OAK FORESTS, REQUALIFICATION OF RIPARIAN GALLERIES AND CONSERVATION ACTIONS FOR TARGET SPECIES.

SINCE 2008 THE PARK HAS BEEN SUPPORTED BY OVER 1,750 VOLUNTEERS - WHO HAVE AIDED WITH FIRE SURVEILLANCE, CONTROL OF INVASIVE PLANTS, PLANTING, SEED COLLECTION AND MAINTENANCE OF WALKING ROUTES.



VEGETATION DISTRIBUTION:

NATURAL MEADOWS : 57.4 HA



SHRUB-LAND : 145.4 HA



PINE FOREST : 84.8 HA



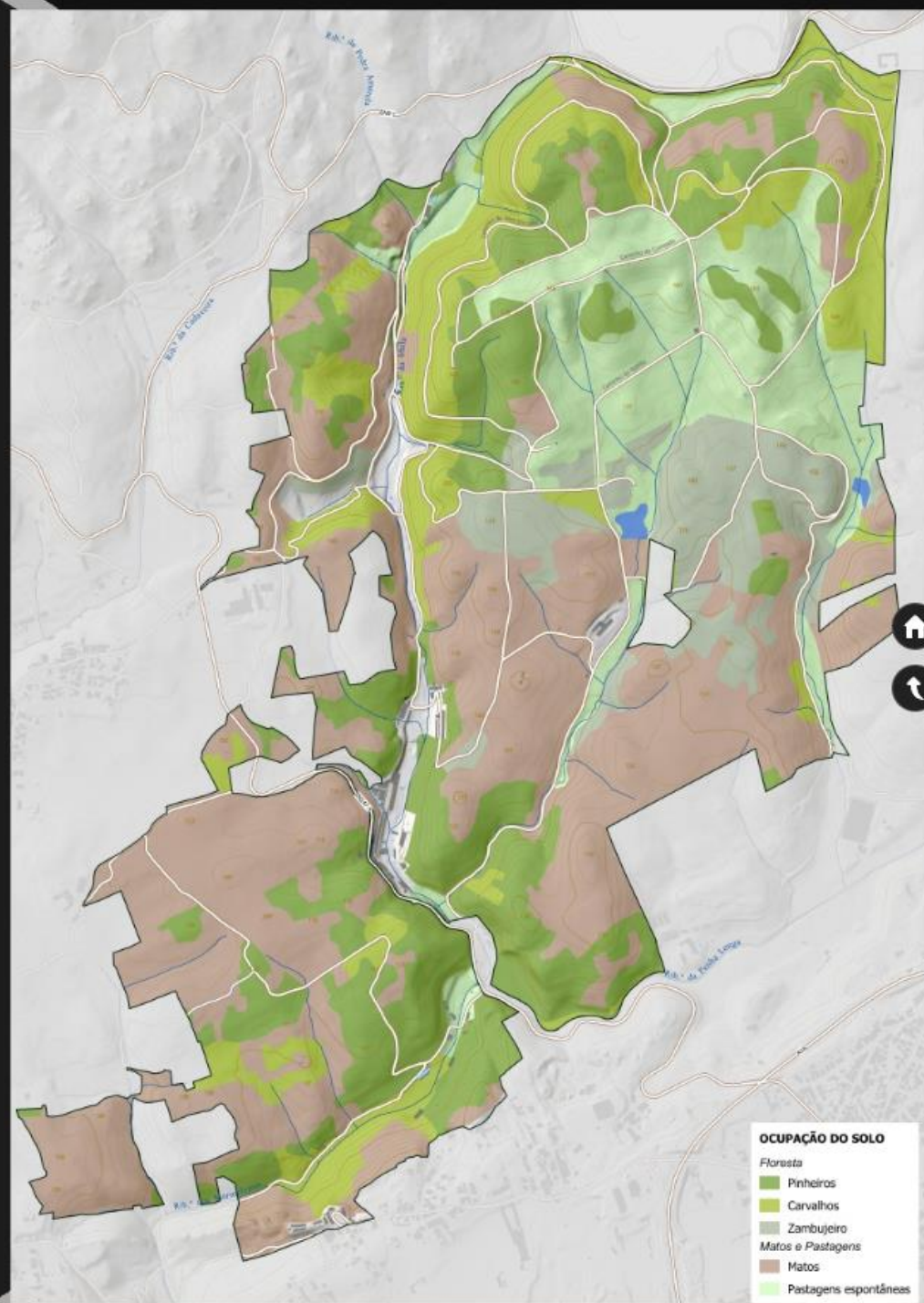
OAK FOREST : 46.6 HA



OLIVE TREE FOREST : 31.5 HA

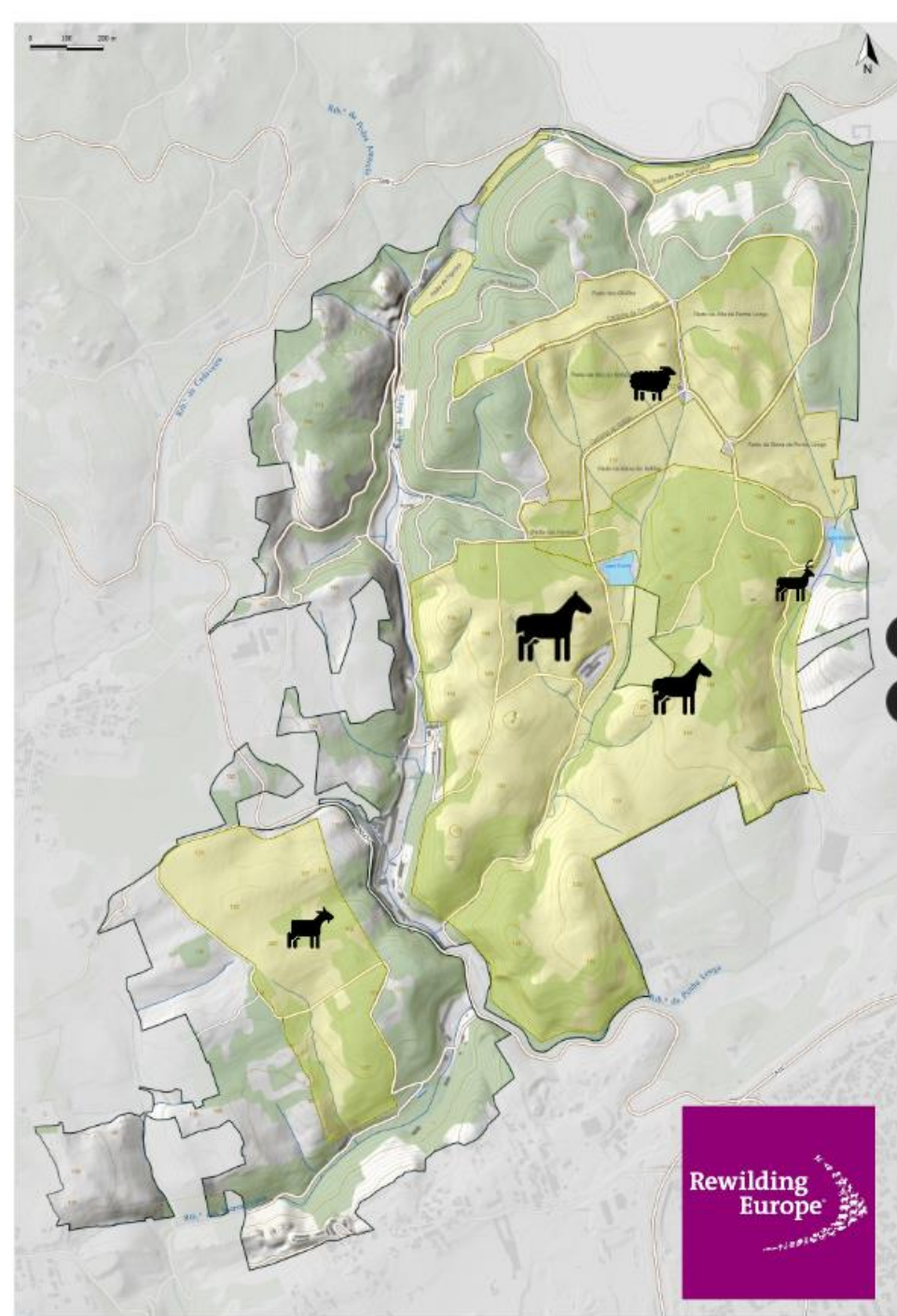


AGRICULTURE : 6.2 HA (FRESH VEGETABLE & HAY)



NATURAL GRAZING & REWILDING ;

- 50 HA OF NATURAL MEADOWS : 150 CAMPANIÇA SHEEPS NATURAL MEADOWS AND 5 MIRANDA DONKEYS;
- 30 HA OF SHRUB-LAND : 30 SERRANA GOATS (IN TRAINING);
- 120 HA OF SHRUB-LAND & OLIVE TREE: 6 SOPPRAIAS HORSES, 15 MIRANDA DONKEYS ;
- 1 HA MIXED MEADOW AND SHRUB-LAND : 3 ROE-DEER (FOUNDING GROUP) ;



NATURAL AND SEMINATURAL HABITATS PRESENT INCLUDE S:

- THERMO-MEDITERRANEAN SCRUB (5330) AND SEMI-NATURAL DRY GRASSLANDS AND SCRUBLAND FACIES ON CALCAREOUS SUBSTRATES (FESTUCO-BROMETALIA) (6210) (*IMPORTANT ORCHID SITES), WHICH HOLDS AROUND 14 ORCHID SPECIES AT QUINTA DO PISÃO;

- SEVERAL HABITAT DIRECTIVE ANEX II AND IV SPECIES PRESENT, INCLUDING LESSER HORSESHOE BAT (RHINOLOPHUS HIPPOSIDEROS), IBERIAN PAINTED FROG (DISCOGLOSSUS GALGANOI), HORNED VIPER (VIPER LATASTEI) AND MEDITERRANEAN TURTLE (MAUREMYS LEPROSA).

- HIGH BIRD DIVERSITY AS A RESULT OF DIFERENT AVAILABLE HABITATS AND ECOTONES, WITH FOREST, OPEN LAND AND FARMLAND COMMUNITIES, AS WELL AS AQUATIC SPECIES. AROUND 134 BIRDS SPECIES HAVE BEEN RECORDED IN QUINTA DO PISÃO OVER THE PAST YEARS.

- MESOCARNIVORE COMUNITY INCLUDES FOX (VULPES VULPES), LEAST WEASEL (MUSTELA NIVALIS), BADGER (MELES MELES), GENET (GENETTA GENETTA) AND EGYPTIAN MONGOOSE (MOMOTIS TOMEUM).



OPHRYs TENTHREDINIFERA



ORCHIS CONICA



ORCHIS ITALICA

HABITAT RESTORATION AND MANAGEMENT :

ACTIONS TO PROMOTE KEY SPECIES POPULATIONS INCLUDING:

- SMALL PATCHES AND STRIPS OF COVER CROPS FOR WILDLIFE, TO INCREASE FOOD AVAILABILITY FOR RABBIT AND PARTRIDGE AMONG OTHER SPECIES.
- CONSTRUCTION OF ARTIFICIAL SHELTERS FOR RABBITS;
- INSTALLATION OF NEST BOXES FOR PROMOTING BIOLOGICAL CONTROL OF SPONGY MOTH OUTBREAKS WITH MAJOR IMPACTS ON YOUNG Q. FAGINEA ;

#HABITAT RESTORATION:

- MANAGEMENT OF INVASIVE PLANTS;
- RESTORATION AND MANAGEMENT OF PONDS AND WATERCOURSES, RIPARIAN FORESTS AND MEDITERRANEAN HUMID TALL GRASSES;
- CONVERSION OF EUCALYPTUS STANDS INTO NATIVE FORESTS;
- SCRUB VEGETATION MANAGEMENT IN ORDER TO REDUCE FUEL LOAD AND PROMOTE NATURAL REGENERATION OF OPEN Q. FAGINEA FORESTS THROUGH A COMBINED AND INTEGRATED APPROACH – MANUAL AND MECHANIC MANAGEMENT, PRESCRIBED FIRE AND NATURAL GRAZING WITH NATIVE H AND DONKEY SPECIES.;



Prezi



RIVER RESTORATION AND MONITORING:

- CHARACTERIZATION OF BIOLOGICAL COMMUNITIES ;
- PRESENCE OF SPECIES WITH HIGH PROTECTION STATUS;
 - PORTUGUESE BOGA; -*IBEROCHONDROSTOMA LUSITANICUM*
- CRITICAL ENDANGERED ;
 - ESCALO DO SUL - *SQUALIUS PYRENAICUS* - ENDANGERED
- REINTRODUCTION OF BOGA, ESCALO AND VERDEMÂ (*COBITIS PALUDICA*), IN A WATER POND AS A "RESERVE" POPULATION;



MONITORING:

- BUTTERFLY TRANSECT COUNTS;
- HERPETOFAUNA TRANSECT COUNTS;
- BIRD POINT COUNTS;
- CAMERA TRAPPING PROGRAM;
- WORK IN PROGRESS: IMPLEMENTING RABBIT AND PARTRIDGE CENSUS;
- FUTURE PERSPECTIVES: BAT PASSIVE ACOUSTIC SURVEYS;

HORSES WELFARE AND HABITAT USE MONITORING:

- BODY CONDITION SCALES;
- MOVEMENTS (GPS);
- BEHAVIOR – ASSESS SOCIAL INTERACTIONS AND STRUCTURE;
ASSES FOOD RESOURCES SELECTION, ASSESS INDIVIDUAL
BEHAVIORS INDICATIVE OF GOOD CONDITION;





A LIVING LANDSCAPE

THE FARM;

- 55 HA ORGANIC FARM MEADOW'S;
- 150 SHEEP'S OF CAMAPANIÇA ENDANGERED NATIVE BREEDS;
- PRODUCES AND SELLS ORGANIC VEGETABLES 26 TON/YEAR IN 1,5 HA, VISITORS ARE INVITED TO "PICK THEIR OWN CROP";
- PARTNERSHIPS WERE MADE WITH LOCAL BEEKEEPERS TO PRODUCE HONEY, 1 TON/YEAR;
- ALSO WITH A SOCIAL PARTNER TO PRODUCE JAMS FROM THE VEGETABLE GARDEN PRODUCTION.;
- ALL GOODS ARE SOLD IN THE FARM SHOP PROMOTING THE SUSTAINABLE DEVELOPMENT, LOCAL AND SEASONAL FOOD.



HEALTH AND SOCIAL BENEFITS

- OF THE MORE THAN 145 000 PEOPLE WHO VISITED THE PARK IN 2020, IT IS EXPECTED THAT MANY LOCAL PEOPLE BENEFITED IN TERMS OF MORE OPPORTUNITIES FOR PHYSICAL RECREATION AND ORGANIZED ACTIVITIES.
- THE SOCIAL BENEFITS COME FROM THE FACT THAT THE PARK IS OPEN 24 HOURS A DAY, FREE OF CHARGE AND THEREFORE ACCESSIBLE TO EVERYONE TO DEVELOP THEIR ACTIVITY OF PASSIVE OR ACTIVE RECREATION.
- VISITORS CAN PICK AND PURCHASE HOME GROWN SEASONAL ORGANIC PRODUCE IN THE PARK'S FARM, WITH THE AIM TO ENCOURAGE PEOPLE TO EAT MORE HEALTHILY AND TO RAISE THEIR AWARENESS ON THE VALUE OF LOCAL AND SEASONAL FOOD.



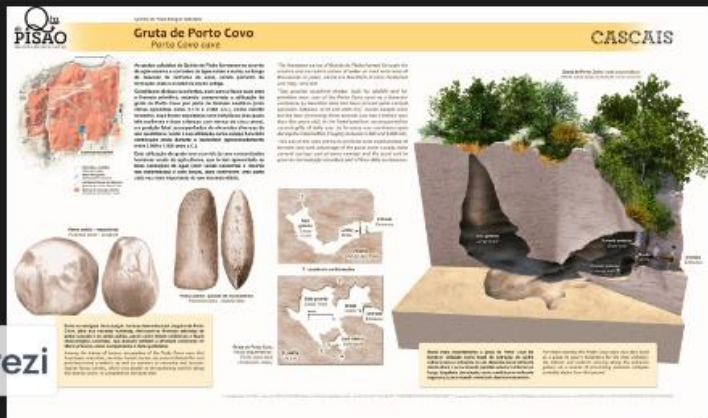
SOCIAL AND EDUCATIONAL OPPORTUNITIES'

- THE PARK PROMOTES GREEN JOBS, 15 RANGERS AND 25 NATURE CONSERVATION, FORESTS AND TOURISM TECHNICIANS ARE ORGANIZED, INVOLVED AND SUPPORT THE PARK MANAGEMENT.
- EDUCATIONAL PROGRAMS ORGANIZED IN THE PARK PROMOTE SOCIAL INCLUSION AS THEY ARE AVAILABLE TO EVERYONE (AND OFTEN OFFERED FOR FREE).
- A NATURE WORKSHOP PROGRAM PROMOTES ACTIVITIES LIKE BIRD WATCHING, MUSHROOM AND WILD PLANT IDENTIFICATION, DONKEY TRAILS AND MANY OTHER ACTIVITIES, INVOLVING 4 450 PARTICIPANTS IN MORE THEN 700 ORGANIZED ACTIVITIES IN 2021;



HISTORICAL AND CULTURAL HERITAGE

- HERITAGE SITES WERE RESTORED SUCH AS THE PORTO CÔVO CHAPEL (16TH CENTURY), AS WELL AS SOME STABLES, WELLS AND WATERMILLS AND WATER CANALS;
- A WAREHOUSE WAS RECOVERED AND CONVERTED IN THE VISITOR INTERPRETATION CENTER;
- INTERPRETATION SIGNS IN THE PARK, PROVIDE VISITORS WITH INFORMATION ON THE EXISTING NATURAL AND CULTURAL HERITAGE, GUIDED TOURS ARE ALSO AVAILABLE;



VISITOR'S EXPERIENCE

- CURRENTLY THE PARK RECEIVES 21 000 VISITORS PER MONTH;
- A SURVEY WAS MADE WITH 273 INQUIRIES, WERE 20,5% OF THE VISITORS COMES TO THE PARK TWO TIMES A WEEK AND 14% ON DAILY BASES;
- THE MAIN PURPOSE OF THE VISITORS IS, THE CONTACT WITH NATURE (76,9%), TO ENJOY THE LANDSCAPE (86.4%) AND TO RELAX IN THEIR FREE TIMES (71,1%);
- THIS LANDSCAPE REACTIVATION ALLOWS LOCAL COMMUNITIES TO GAIN ACCESS TO THE COUNTRYSIDE AND TO BE LINKED WITH NATURE;
- DUE TO THE CREATION OF THE INTERPRETATION CENTER, WALKING AND CYCLE PATHS, THE PARK PROVIDES VISITORS WITH A NEW RESOURCE FOR RECREATION, EDUCATION AND A HEIGHTENED WELL-





LANDSCAPE SCALE CONSERVATION

CASCATS LANDSCAPE PLAN FOR NATURAL PARK

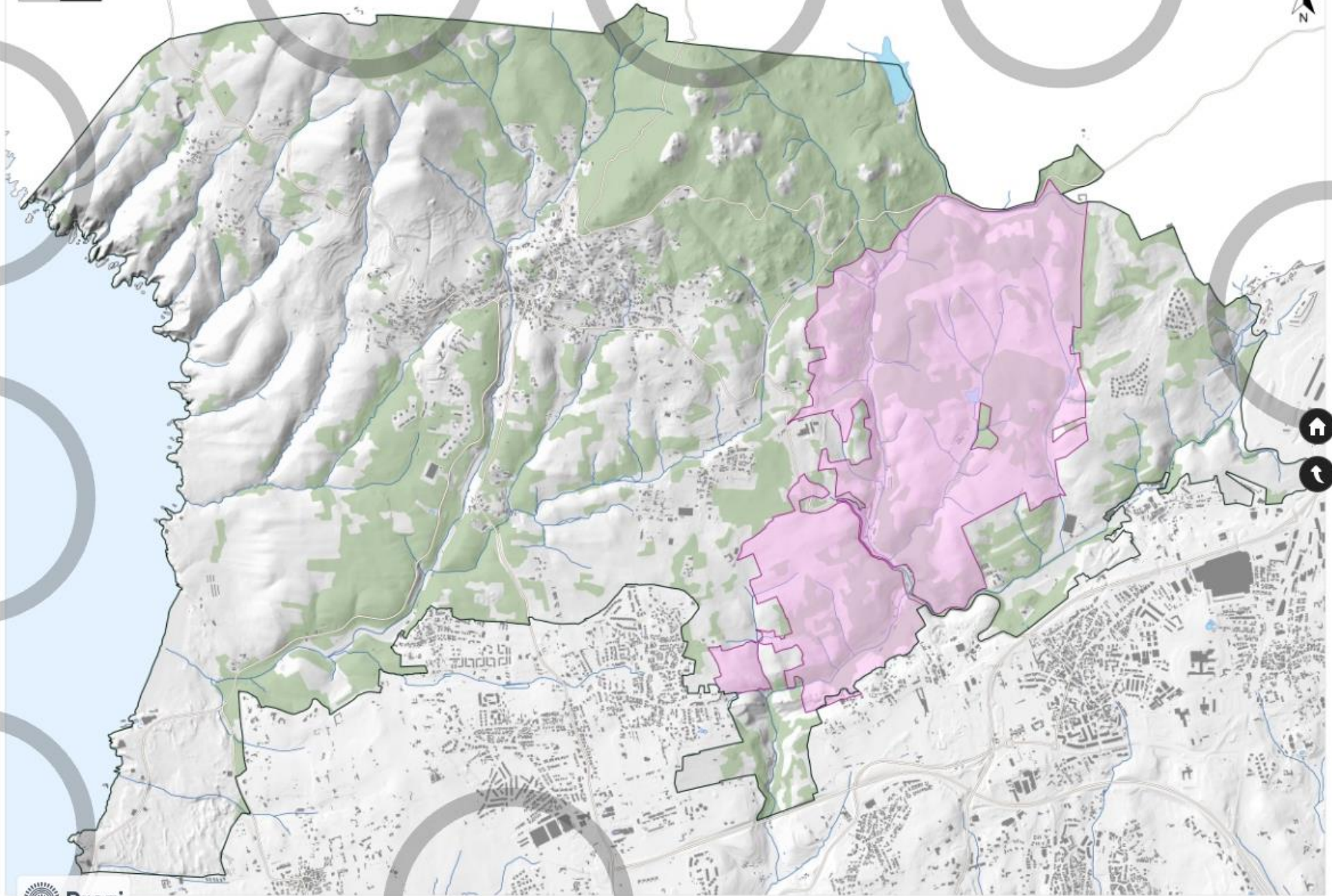
MASTER PLAN (2 300 HA) FOR A MORE RESILIENT AND ADAPT TO CLIMATE CHANGE LANDSCAPE AND FIRE RISK ;

EVOLVING PRIVATE LANDOWNERS IN A COOPERATIVE LAND MANAGEMENT SCHEME, PROVIDING NEW OPPORTUNITIES FOR NATURE CONSERVATION, FARMING AND ECO-TOURISM;

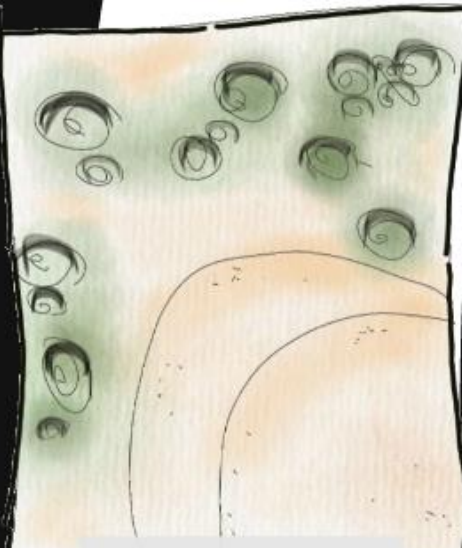
COMMUNITY ENGAGEMENT IN THE ECOLOGICAL RESTORATION PROCESS TO RAISE AWARENESS ABOUT NATURAL VALUES AND FIRE RISKS;



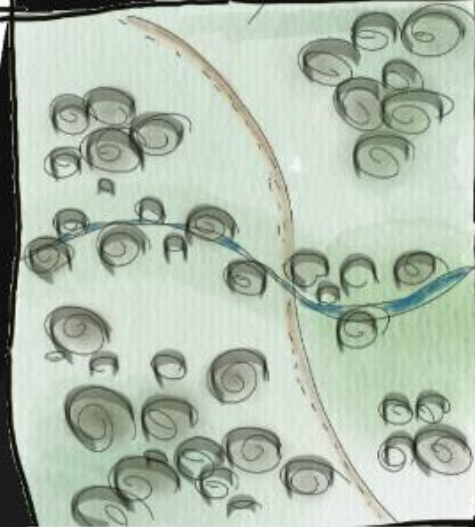
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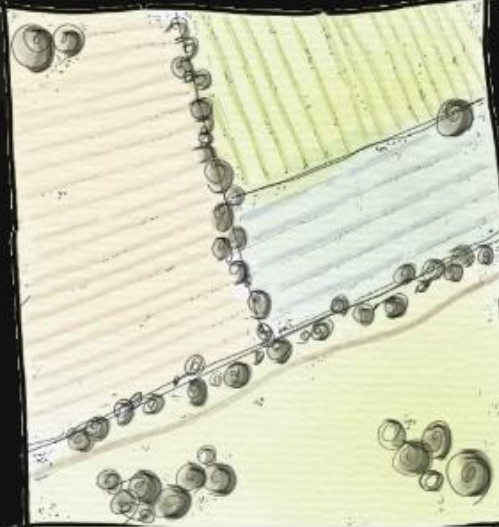
HABITAT MANAGEMENT CONCEPTUAL MODELS



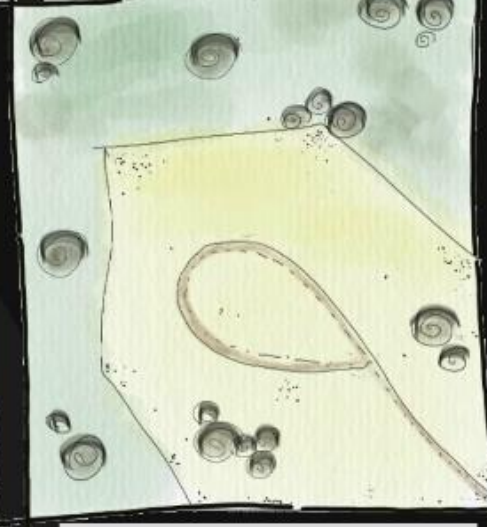
DUNES COMPLEX



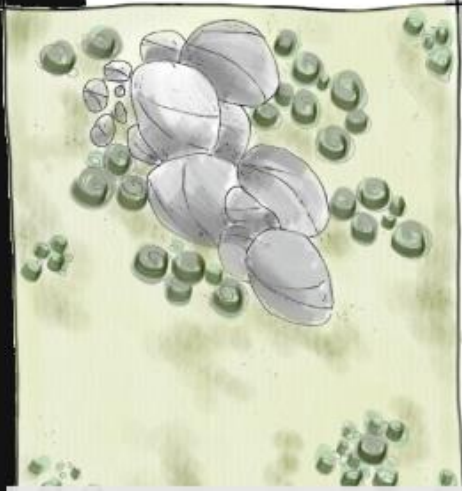
NATIVE FOREST



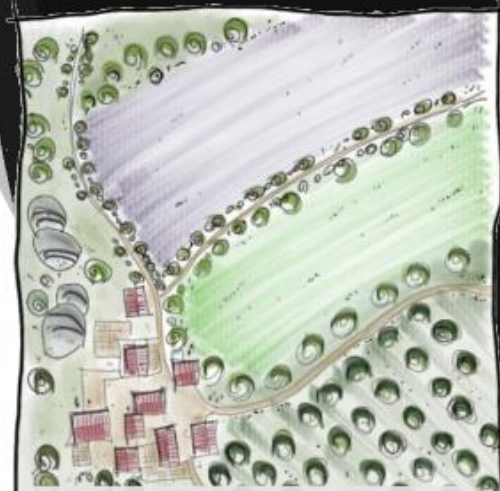
NATURAL PASTURE AND FORAGES



NATURAL PASTURE & SHRUB



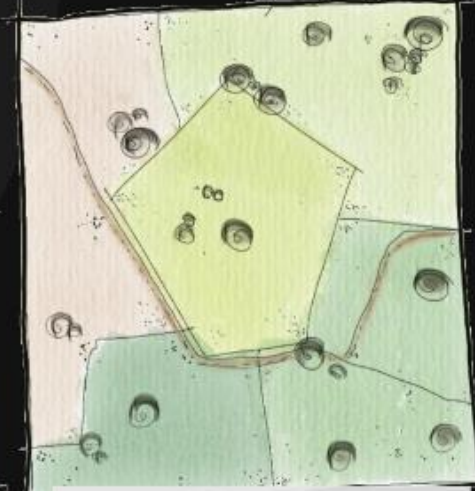
NATURAL PASTURE



AGRICULTURAL MOSAIC

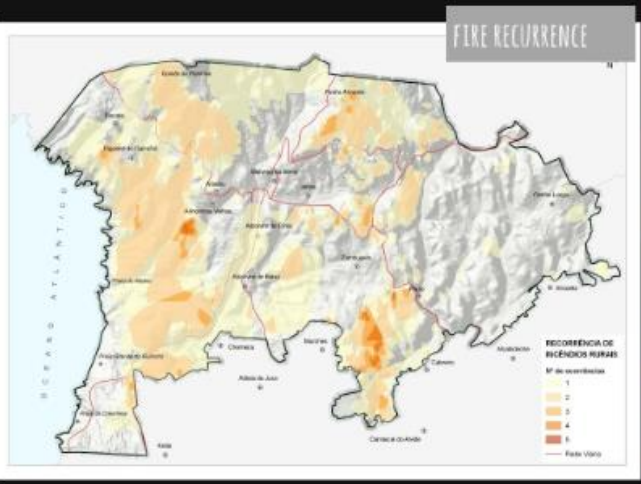
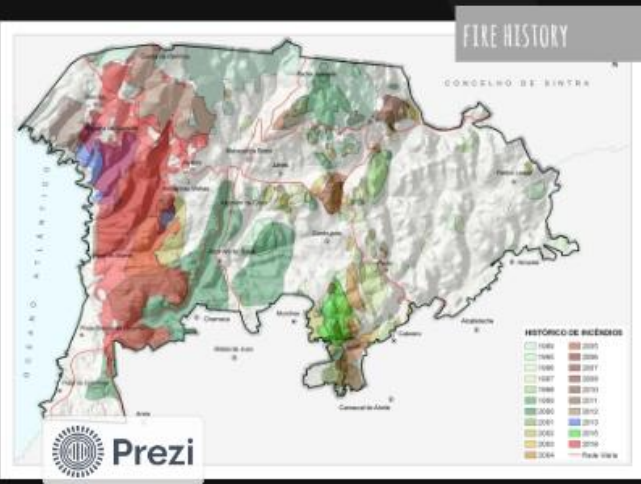


STREAMS AND RIPARIAN GALLERY



SHRUB LAND IN MOSAIC





THINK BIG...!!!

PLAN AHEAD WITH A 10 YEARS VISION, MAKE A ROAD MAP ;

GET POLITICAL COMMITMENT;

INVEST IN COLLECTING DATA AND HAVE A GOOD ECOLOGICAL AND LANDSCAPE ASSESSMENT;

BUILD YOU OWN TEAM, WITH PASSION PEOPLE FOR NATURE AND BIODIVERSITY;

ENGAGE LOCAL COMMUNITY, USE SOCIAL MEDIA TO GET NATURE IN THERE DAILY LIFE'S;



THANK YOU ...!!



JOAO.MELO@CASCAISAMBIENTE.PT

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