



Arma dei Carabinieri



Trail camera use in Vallombrosa Forest

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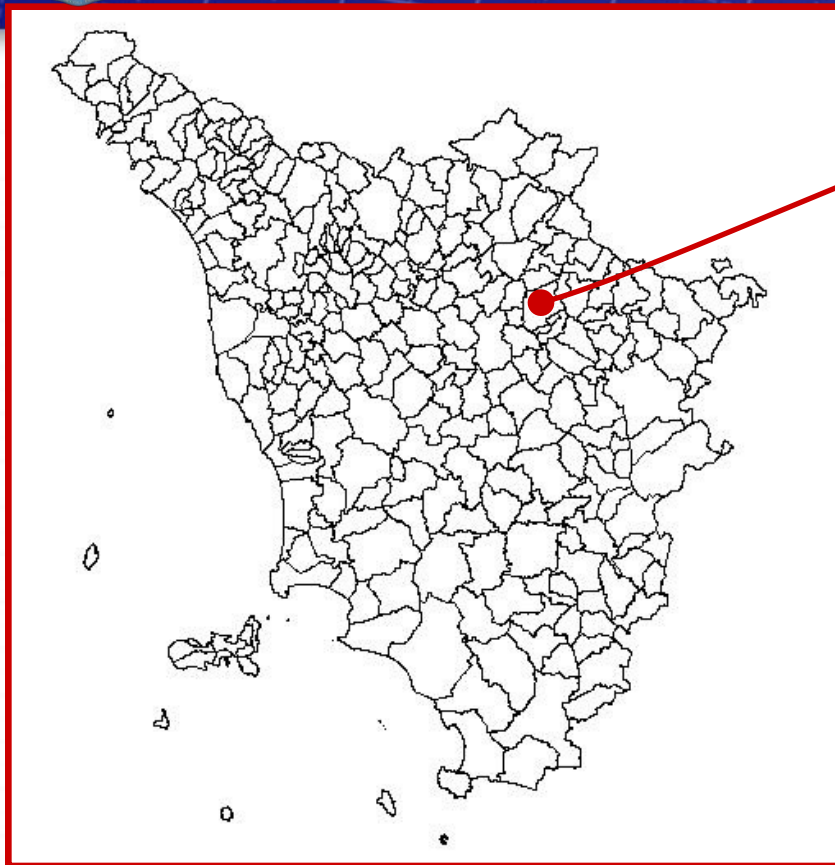


Natural Reserves managed by Carabinieri





Where and what is Vallombrosa Natural Reserve?



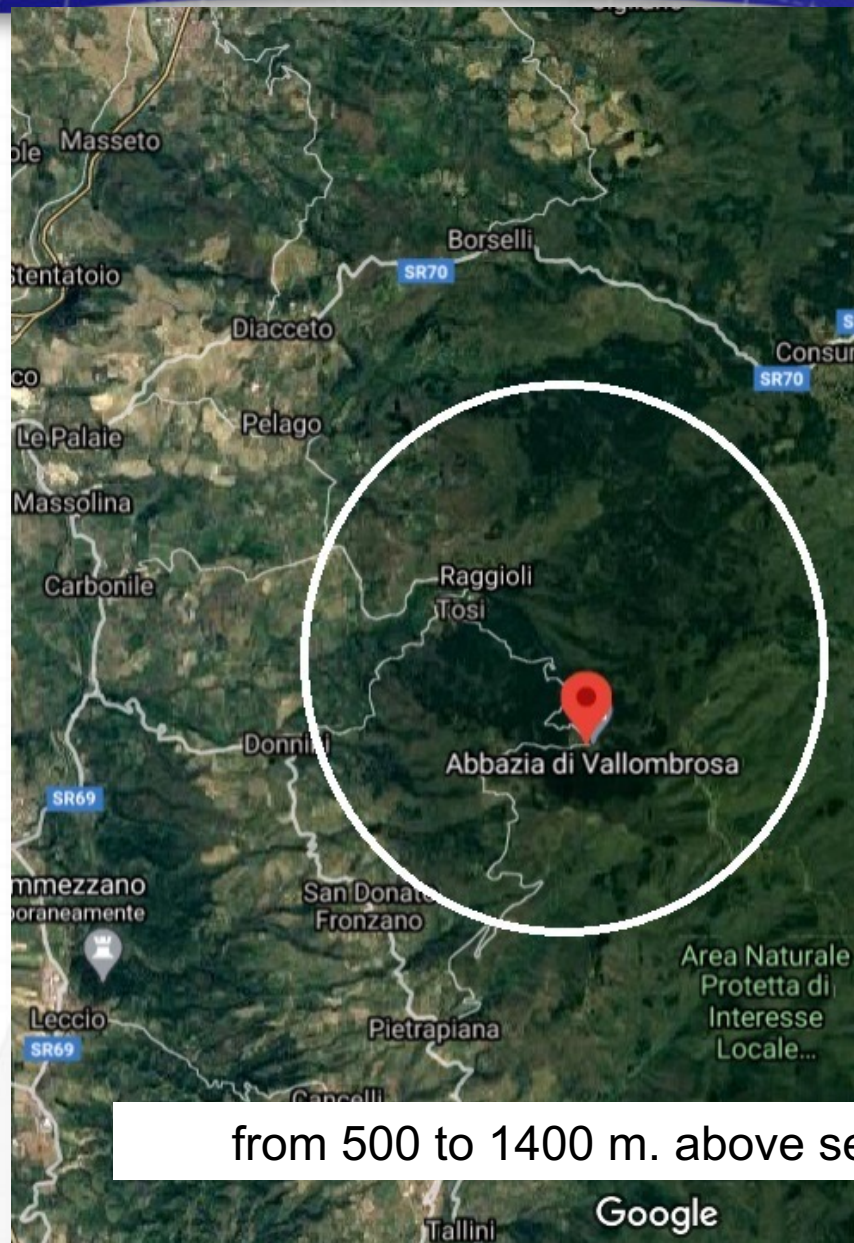
PROVINCIA DI FIRENZE

COMUNE DI REGGELLO

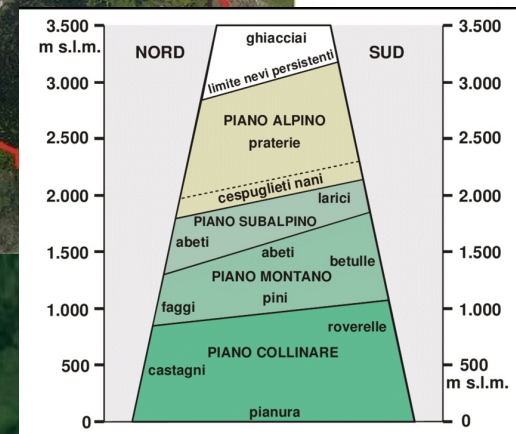
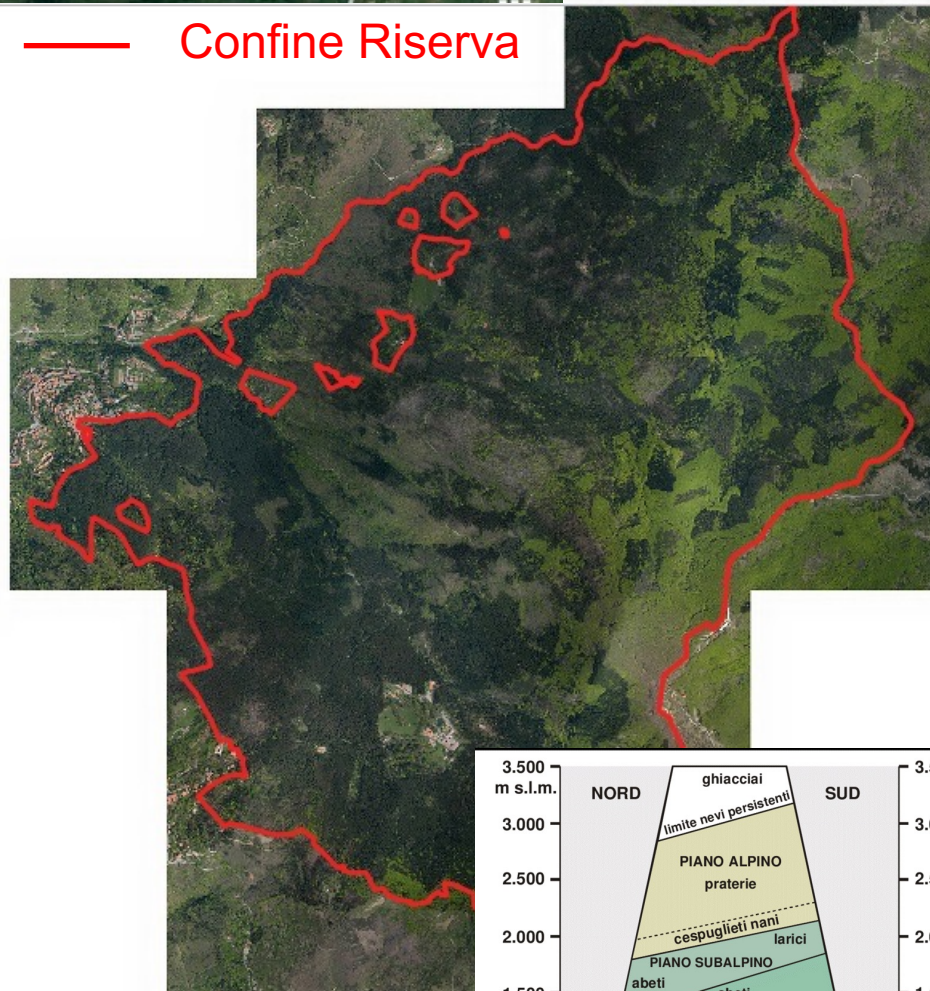




Where and what is Vallombrosa Natural Reserve?



— Confine Riserva



from 500 to 1400 m. above sea level



Forest management





Forest management... and what else??

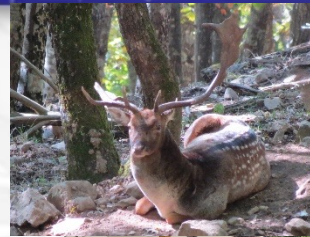


FOREST RESEARCH SPOT

Universities, Research Institutes, BGCI

Developing of an innovating management plan

Natura 2000 site



OTHER USE OF FOREST

Tourism (weather conditions, abbey, highest plants in Italy..)

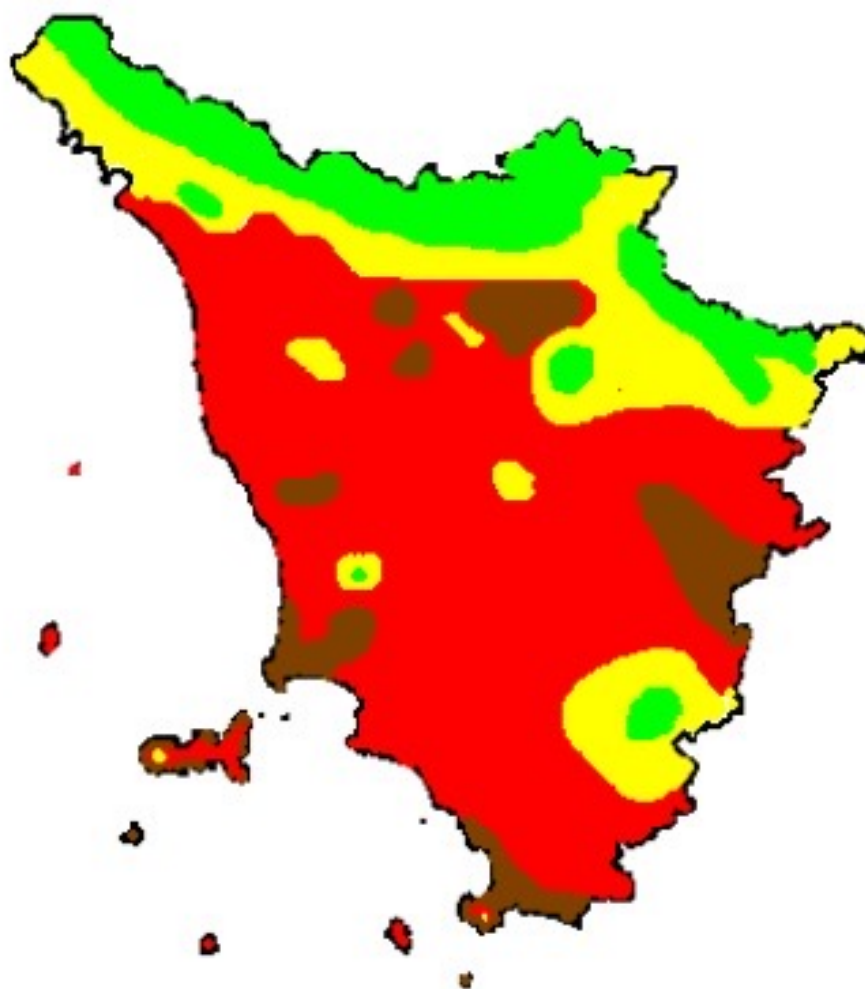
Sports (trekking, bike etc..)

Forest bathing (For.Sa.)

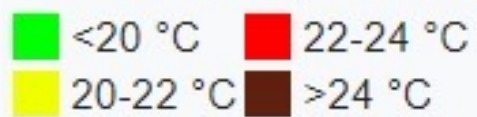




Why semiotourism?



Carta della temperatura media di luglio





Where and what is Vallombrosa Natural Reserve?





Why am I using a trial camera?

OUR EXPERIENCE IN VALLOMBROSA 3 MAIN PURPOSES:

Nature 2000 or generally scientific monitoring

Surveillance

Material to promote the image of the Reserve or our activities



Nature 2000 and ecosystem monitoring

Monitoring for scientific purpose \neq single use of a trial camera

Lot of work before the use of the camera:

scientific protocol to validate and to analyze the data:

many cameras involved,
distribution net,

camera checking: who, how and how often,
data collecting and control

USUALLY NOT ONLY ONE CAMERA



Surveillance

Phenomenon

(e.g. a damage on a tree root, a sign of passage in shrubs, wasted materials...)



CLUE of what is the **TARGET** I am trying to video/photo capture
(footprints/carprints, animal feces, waste, traces of human activities...)

known

unknown

Human?
Animal?
Other?

Tips on:

- choose the right instrument (battery, memory...);
- choose the right settings (only video? pictures? both?)
- where and how to place (hypotesis on size, behaviour, movement speed, ...)



what is the **AIM** of the video/photo capture

(just presence? Recognize species (or people)? Count the presence number?)



Material to promote the Reserve image and activities



IMPORTANT: Often the best material is already available,
but sometime you can be lucky....

OUR EXPERIENCE EXAMPLE:

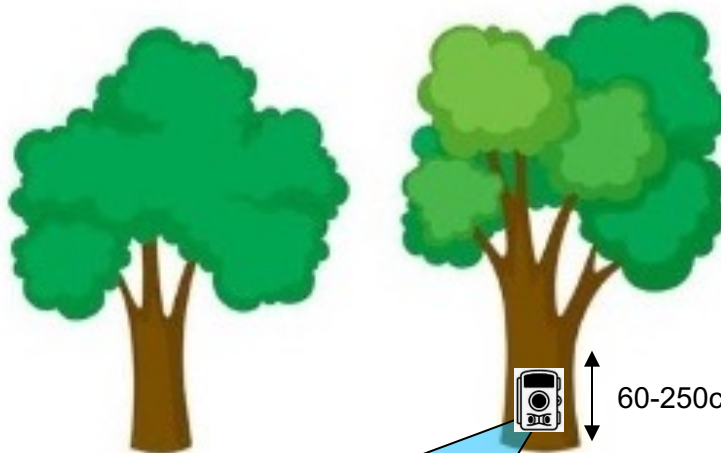
Presence of wolves





Placement

Big mammals (from cat size)



60-250cm

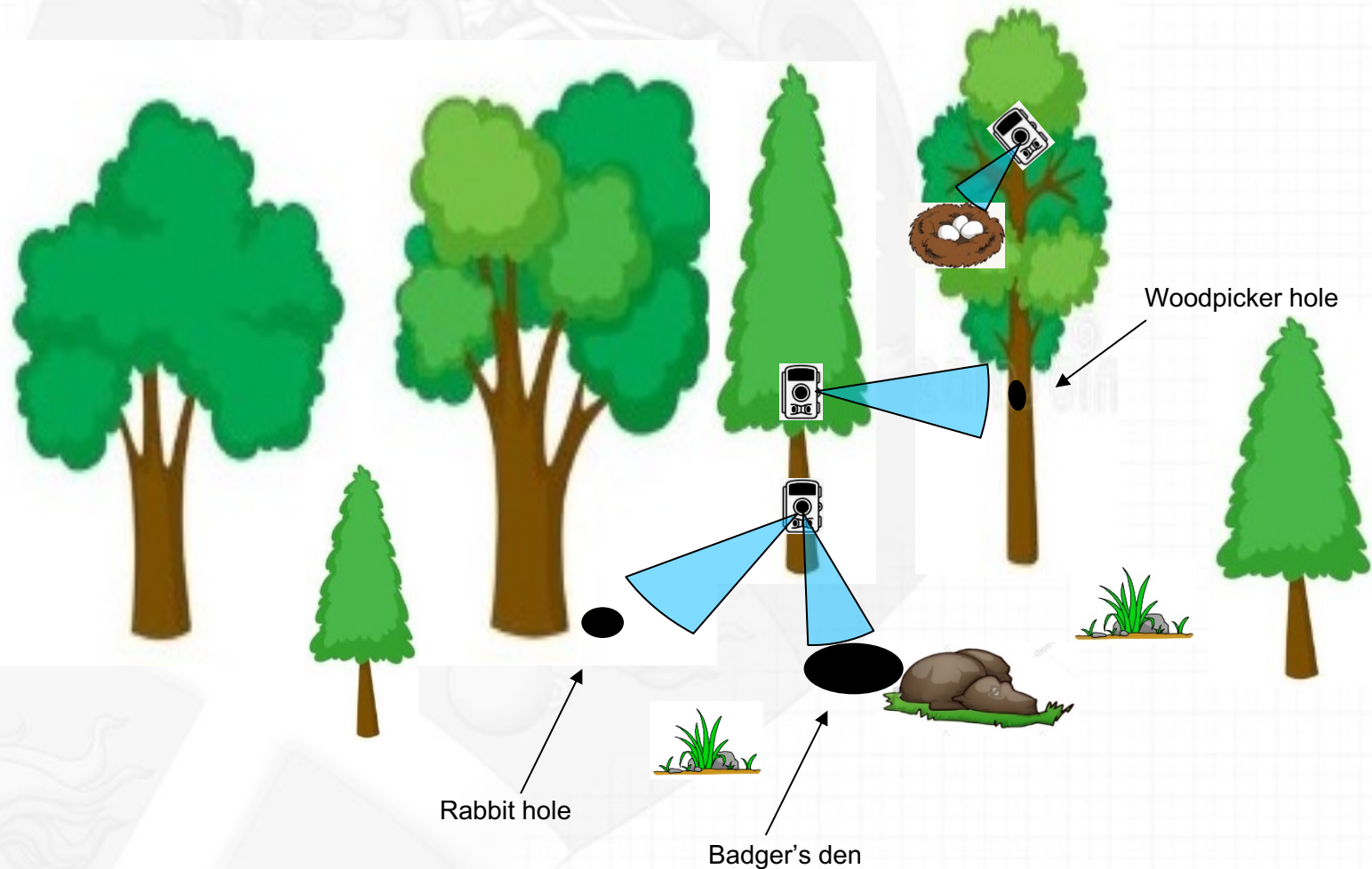
Passage path (presumed)





Placement

Birds (nesting, on ground), small sized animals...NOT HUMANS





Placement

Vehicles



0 - 400cm

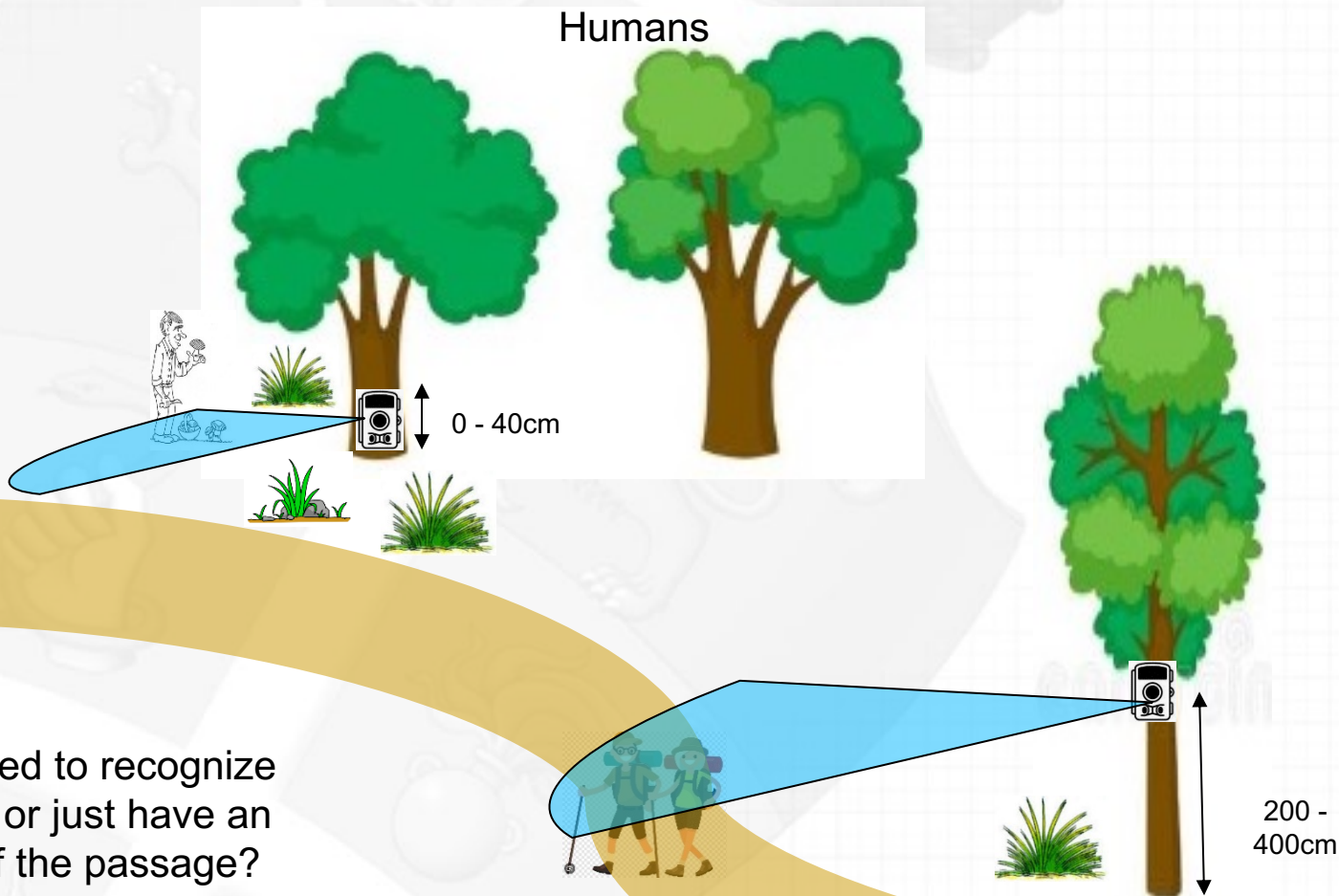
HIDING RECOMMENDED!





Placement

Humans



Do I need to recognize people or just have an idea of the passage?

HIDING **HIGHLY** RECOMMENDED!



Placement



Of course there can be not suitable places for the camera placement.....





Placement



General tips:

Guessing trigger point (camera detection zone) based on clues found

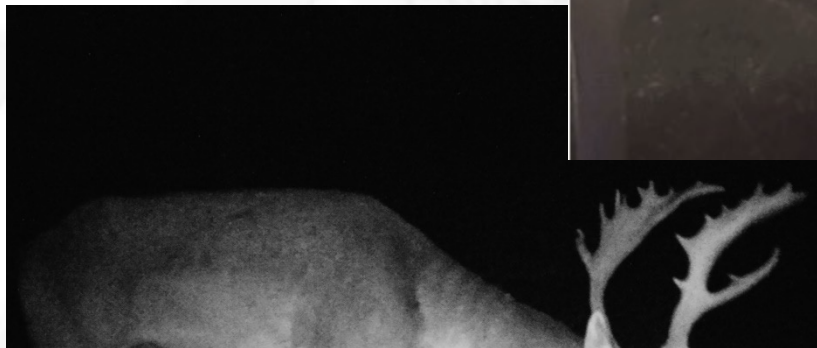
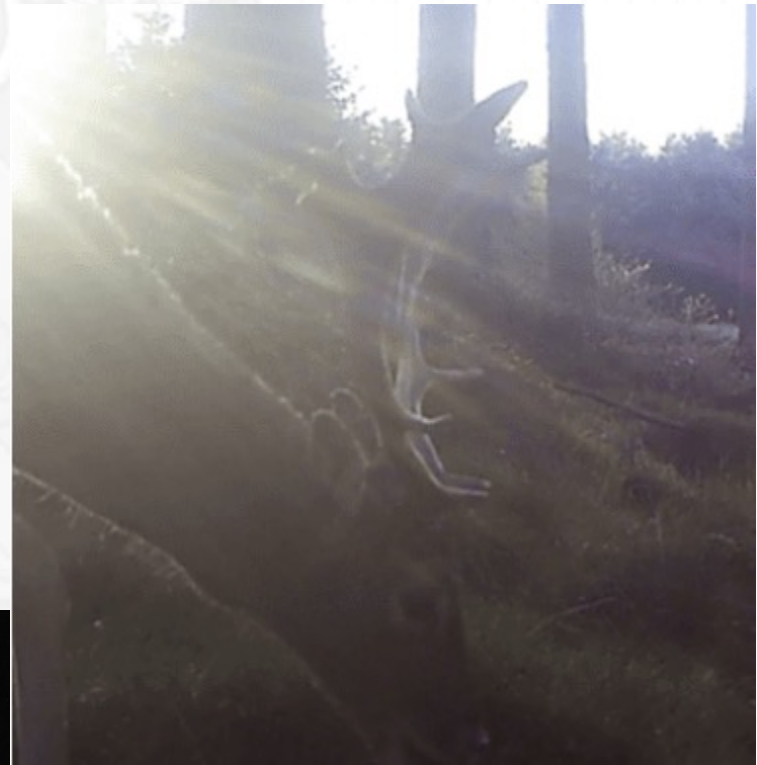




Placement



Light (sunrise, sunset, angling too low or too high)





Placement



Vegetation movement (forest type, season)





Placement



Other examples of multi-target





Placement



Other examples of multi-target





Placement

General tips:

Minimize user's smell & traces (also in checking!)

Trail cameras stealing
(hiding, no glow cameras, lockers, boxes,
tags, serial numbers)





Placement

General tips:

Privacy laws (EU 2016/679 GDPR, national/local laws)

**AREA
MONITORATA CON
DISPOSITIVI
AMOVIBILI DI
VIDEO RIPRESA
DIGITALE PER IL
MONITORAGGIO
FAUNISTICO**

**RAGGRUPPAMENTO CARABINIERI BIODIVERSITÀ
VALLOMBROSA**

- L'ATTIVITÀ DI MONITORAGGIO È SVOLTA DAL REPARTO CARABINIERI BIODIVERSITÀ DI VALLOMBROSA
- I DISPOSITIVI SONO ESCLUSIVAMENTE IMPIEGATI PER IL CENSIMENTO E IL RILEVAMENTO DELLA FAUNA SELVATICA.
- I DATI RACCOLTI SONO CONSERVATI PER IL TEMPO RITENUTO NECESSARIO ALLO SVOLGIMENTO DELLE ATTIVITÀ DI RICERCA/STUDIO.
- EVENTUALI DATI PERSONALI ECCEZIONALMENTE ACQUISITI TRAMITE L'ATTIVITÀ DI MONITORAGGIO, RIFERITI A PERSONE FISICHE INCIDENTALMENTE ED ECCEZIONALMENTE RIPRESE, DIRETTAMENTE O ANCHE INDIRETTAMENTE IDENTIFICABILI, SARANNO IMMEDIATAMENTE CANCELLATI.
- CHIUNQUE RITIENE DI ESSERE STATO INCIDENTALMENTE ED ECCEZIONALMENTE RIPRESO PUÒ CONTATTARE IL REPARTO CC BIODIVERSITÀ DI VALLOMBROSA AL NUMERO 055/862020 O ALLA MAIL 043606.001@CARABINIERI.IT, AL FINE DI CHIEDERE LA CANCELLAZIONE DEI DATI PERSONALI EVENTUALMENTE REGISTRATI.
- IN CASO DI RILEVAZIONE DI IMMAGINI O VIDEO CONCERNENTI IPOTESI DI REATO, NE SARÀ DATA COMUNICAZIONE ALL'AUTORITÀ GIUDIZIARIA, PROVVEDENDO NEL CONTEMPO ALLA:
 - CONSERVAZIONE DELLE IMMAGINI O DEI VIDEO SU APPOSITI SUPPORTI MAGNETICI NON RISCRIVIBILI;
 - TRASMISSIONE DELLA COMUNICAZIONE DI NOTIZIA DI REATO CORREDATA DEI SUPPORTI VIDEO, IN VERSIONE INTEGRALE, FACENDO MENZIONE DELLE OPERAZIONI CONDOTTE.
- AL RIGUARDO, L'UTILIZZABILITÀ DELLE IMMAGINI REGISTRATE È CONSENTITA AI SENSI DEGLI ARTICOLI 2 DECIES E 160 BIS DEL D. LGS. 30 GIUGNO 2003 N. 196 (C.D. CODICE DELLA PRIVACY).



Placement



Last IMPORTANT tip:

! set date & time !

Reference: [How to Place Your Camera Traps – NatureSpy](#)



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Thanks for your attention!

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