





L'importanza del trasferimento delle tecniche di intervento per la biodiversità forestale

The importance of transferring intervention techniques for forest biodiversity

Pierluca Gaglioppa (REGIONE LAZIO)



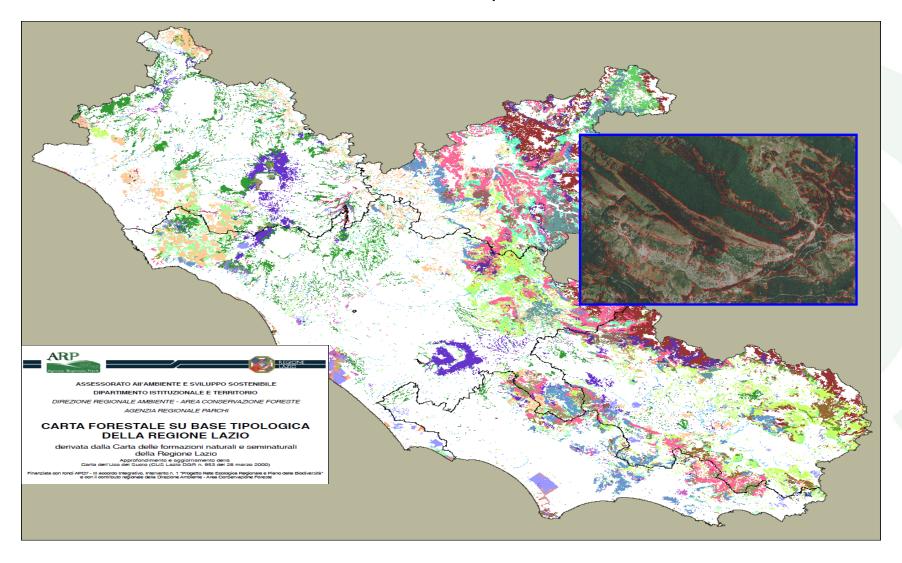
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LIFE E RETE NATURA 2000

Dall'esperienza dei Progetti verso un modello condiviso per la Gestione Forestale

LIFE AND NATURA 2000 NETWORK

Forest data/composition





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| LEGENDA | | | | | |
|----------------------|----------------------------|---|--|--|--|
| | CATEGORIA | TIPOLOGIA | | | |
| | LECCETE | Lecceta costiera termofila Lecceta mesoxerofila Lecceta con faggio Lecceta rupicola | | | |
| FORMAZIONI FORESTALI | SUGHERETE | Sughereta con caducifoglie Sughereta costiera tipica | | | |
| | PINETE TERMOFILE | Pineta di altre specie termofile Pineta di pino domestico | | | |
| | QUERCETI A ROVERELLA | Queroeto a roverella mesoxerofilo Queroeto a roverella con cerro | | | |
| | CERRETE | Oueroeto a cerro e farnetto Cerreta neutro-basifila collinare Cerreta acidofila e subacidofila collinare Cerreta neutro-basifila submontana Cerreta acidofila e subacidofila submontana | | | |
| | QUERCETI A FARNIA | Querceto a farnia | | | |
| | BOSCHI ALVEALI E RIPARIALI | Saliceto ripariale Altri boschi igrofili | | | |
| | BOSCHI DI FORRA | Boseo di forra | | | |
| E | OSTRIETI | Omo-ostrieto e boscaglie a carpinella Ostrieto mesofilo | | | |

| | CASTAGNETI | Castagneto (eutrofico) su depositi vulcanici Castagneto (oligotrofico) su lave acide Castagneto dei substrati arenacei e mamosi Castagneto dei rilievi calcarei |
|----------------------------|--|---|
| | FAGGETE | Faggeta altomontana e rupestre Faggeta montana eutrofica Faggeta termofila e basso montana |
| | ROBINIETI E ALLANTETI | Robinieto/ailanteto |
| | RIMBOSCHIMENTI DI PINI E/O ALTRE CONIFERE MONTANE | Rimboschimento di pini e/o altre conifere montane |
| | PIANTAGIONI DI ARBORICOLTURA DA LEGNO | Piantagione di arboricoltura da legno |
| | BOSCHI DI NEOFORMAZIONE | Boschi di neoformazione |
| IONI | PSEUDO MACCHIA | Querceto a caducifoglie mediterranee xerofile Boscaglie a paliuro e terebinto |
| FORMAZIONI PREFORESTALI | ARBUSTETI E MACCHIE ALTE | Arbusteti a specie della macchia mediterranea Arbusteti temperati |
| | | |

| | Formazioni forestali | Formazioni preforestali (boscaglie, macchie alte, mantelli) |
|-----------|-------------------------|--|
| CATEGORIE | 15 | 2 |
| TIPOLOGIE | 32 | 4 |



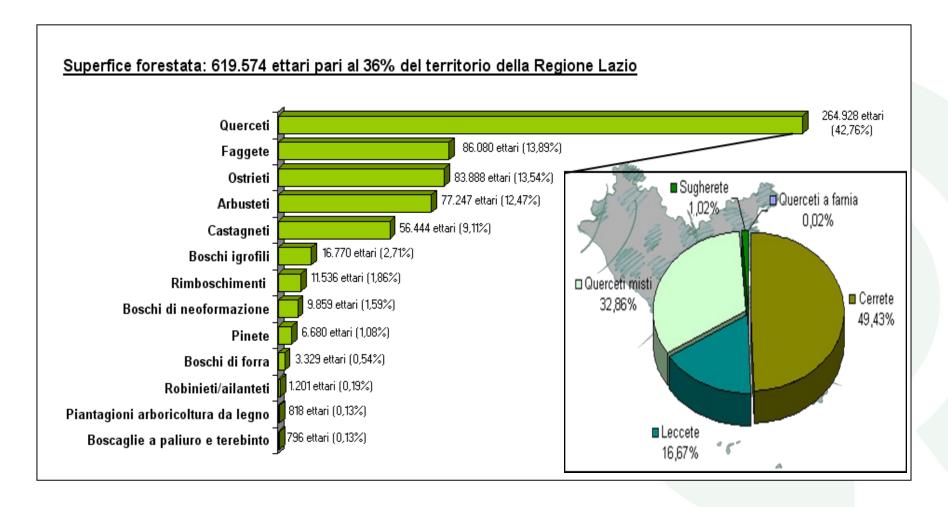
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Dati riferiti 2011



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| Governo | TIPOLOGIA | Totale ETTARI | % |
|---------|---|---------------|-------|
| | Cerreta neutro-basifila collinare | 52.180,54 | 15,2 |
| | Querceto a roverella mesoxerofilo | 48.718,48 | 14,2 |
| | Ostrieto mesofilo | 46.267,35 | 13,5 |
| | Cerreta acidofila e subacidofila collinare | 39.939,80 | 11,7 |
| | Lecceta mesoxerofila | 27.396,33 | 8,0 |
| | Castagneto (eutrofico) su depositi vulcanici | 25.012,67 | 7,3 |
| | Castagneto dei substrati arenacei e marnosi | 19.800,22 | 5,8 |
| | Orno-ostrieto e boscaglie a carpinella | 18.260,94 | 5,3 |
| | Cerreta neutro-basifila submontana | 17.046,44 | 5,0 |
| | Querceto a roverella con cerro | 13.102,58 | 3,8 |
| | Faggeta montana eutrofica | 9.876,17 | 2,9 |
| | Cerreta acidofila e subacidofila submontana | 8.134,72 | 2,4 |
| | Querceto a cerro e farnetto | 7.002,06 | 2,0 |
| | Castagneto dei rilievi calcarei | 3.876,29 | 1,1 |
| CEDUO | Faggeta termofila e basso montana | 2.030,47 | 0,6 |
| CEDUO | Lecceta costiera termofila | 1.652,61 | 0,5 |
| | Robinieto/ailanteto | 518,57 | 0,2 |
| | Castagneto (oligotrofico) su lave acide | 289,33 | 0,1 |
| | Bosco di forra | 256,90 | 0,1 |
| | Sughereta con caducifoglie | 215,88 | 0,1 |
| | Lecceta con faggio | 132,92 | 0,0 |
| | Faggeta altomontana e rupestre | 112,69 | 0,0 |
| | Altri boschi igrofili | 105,87 | 0,0 |
| | Piantagione di arboricoltura da legno | 74,71 | 0,0 |
| | Sughereta costiera tipica | 66,80 | 0,0 |
| | Lecceta rupicola | 41,97 | 0,0 |
| | Querceto a farnia | 26,11 | 0,0 |
| | Saliceto ripariale | 15,26 | 0,0 |
| | Arbusteti temperati | 12,86 | 0,0 |
| | Rimboschimento di pini e/o altre conifere montane | 1,30 | 0,0 |
| Totale | | 342168,8 | 100,0 |

From sea level to 2.400 altitude meters

From xeric to alpine/ continental ecosystem

From dunes with

Juniperus phoenicea

L. to peacks with

Fagus sylvatica L.

krumholtz

Coppice is about 55% of all woodland



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| Governo | TIPOLOGIA | Totale ETTARI | % |
|---------|---|---------------|------|
| | Faggeta montana eutrofica | 66.956,45 | 69,6 |
| | Rimboschimento di pini e/o altre conifere montane | 9.278,61 | 9,6 |
| | Pineta di pino domestico | 4.050,84 | 4,2 |
| | Querceto a cerro e farnetto | 4.036,72 | 4,2 |
| | Castagneto (eutrofico) su depositi vulcanici | 2.460,59 | 2,6 |
| | Pineta di altre specie termofile | 2.371,78 | 2,5 |
| | Faggeta termofila e basso montana | 1.482,52 | 1,5 |
| | Cerreta acidofila e subacidofila collinare | 1.376,82 | 1,4 |
| | Sughereta con caducifoglie | 1.092,91 | 1,1 |
| | Castagneto dei rilievi calcarei | 892,63 | 0,9 |
| | Piantagione di arboricoltura da legno | 667,13 | 0,7 |
| | Altri boschi igrofili | 441,15 | 0,5 |
| | Faggeta altomontana e rupestre | 352,90 | 0,4 |
| Fustaia | Ostrieto mesofilo | 204,04 | 0,2 |
| | Querceto a roverella mesoxerofilo | 134,26 | 0,1 |
| | Cerreta neutro-basifila submontana | 74,05 | 0,1 |
| | Cerreta neutro-basifila collinare | 54,49 | 0,1 |
| | Saliceto ripariale | 49,01 | 0,1 |
| | Querceto a roverella con cerro | 35,86 | 0,0 |
| | Lecceta rupicola | 31,64 | 0,0 |
| | Robinieto/ailanteto | 31,55 | 0,0 |
| | Orno-ostrieto e boscaglie a carpinella | 31,45 | 0,0 |
| | Cerreta acidofila e subacidofila submontana | 30,03 | 0,0 |
| | Querceto a farnia | 24,87 | 0,0 |
| | Sughereta costiera tipica | 16,61 | 0,0 |
| | Lecceta costiera termofila | 5,95 | 0,0 |
| | Lecceta mesoxerofila | 1,72 | 0,0 |
| Totale | | 96.186,55 | 100 |

High Forest is about 15% of all woodland

Mediterranean climate with oak species is the most representative on the lower lands and beech is the king of the Apenine

Mixed natural woods is the normality



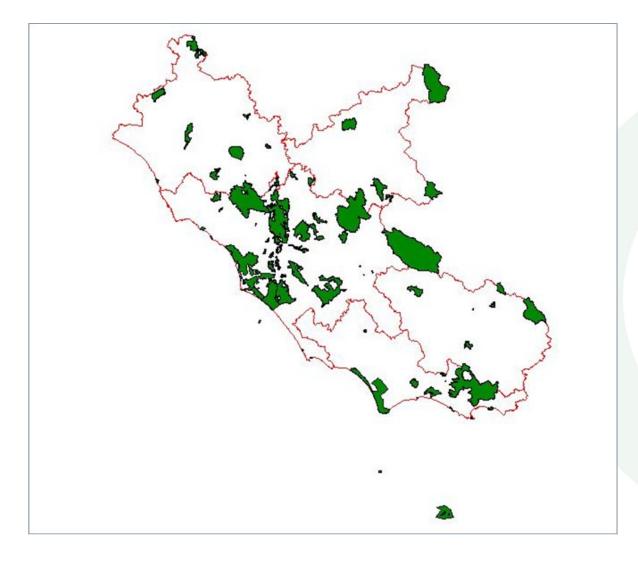
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Dall'esperienza dei Propetti verso un modello condiviso per la Gestione Forestale







PROTECTED AREAS

More than 13% of regional surface

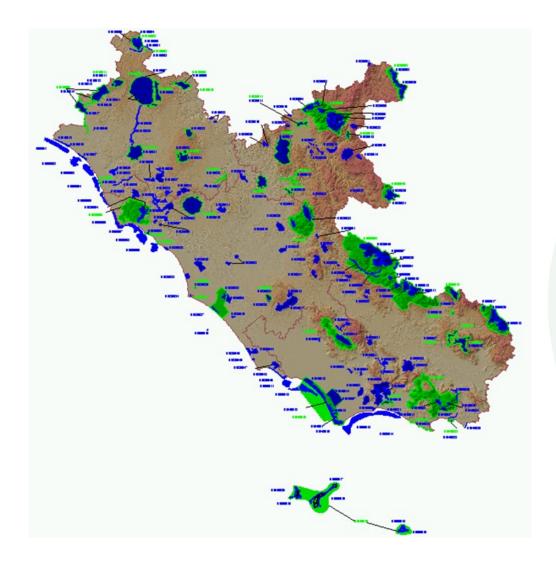
More than 44% forest surface in Pas

3 National Parks
3 National Reserves
9 Regionale Parks
More than 70 other
Pas (Reserves,
Monuments, ...)









NATURA 2000 AREAS

More than 26 % of regional surface

More than 57% forest surface in N2K

Blue: Special

Conservation Zone

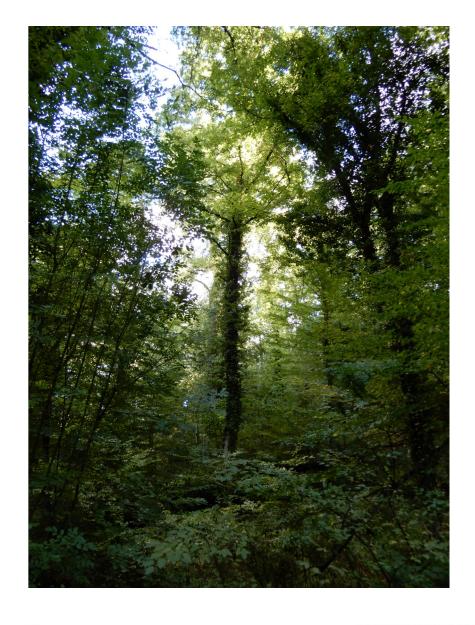
Green: Special

Protection Zone









Forest expertise

Regione Lazio play the policy role, address for other institutions, approve forest plan and funding activities.

Sometimes we plan or we act with some cuts of Regional properties.

Many opportunities comes from analisys and approvation of more than 260 Forest Management Plans (knowledge)



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The Regional Administration example: Forest Management Plan of two owned forest and transfer the value of different approach to the ecosystems

Bosco Montagna – Macchia dell'Ospedale

This is a 450 ha chesnut productive coppice located in Viterbo that historically is used as a timber for construnction; during the planning activities we analized all the different ecosystem services and we decided to give attention to paths, bike's and horse's ways.

The coppice is strictly managed as a chesnut coppice so no other species can entry.

Tiburtina Forest

The property is located in Tiburtini Mountains close to Tivoli is a 850 ha old coppice wood (60 years old) that present so many different species: Quercus, Acer, Ostrya, Fraxinus, Fagus, Tilia, Carpinus, Castanea.

The choice is to change to high forest all the surface











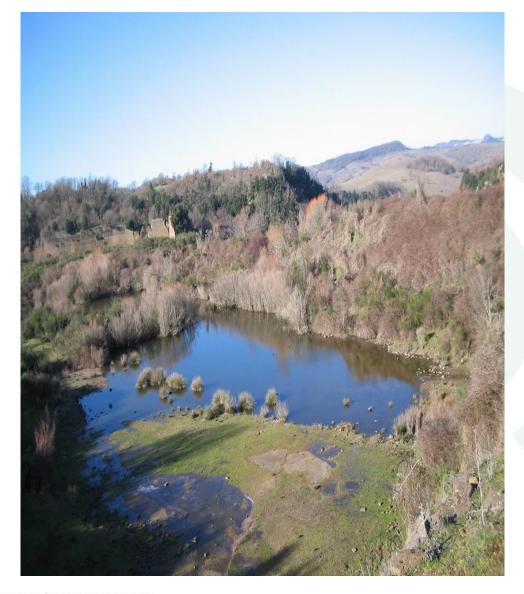


Forest opportunities

Multifunctionality of forest is mandatory in Latium and it is also cultural issue.

Plan the forest management following ecological and hydrogeological stability, different ecosystem services, regulations and wood products, and be also sustainable in the economic view.

The main town, Rome, ask for forest ecosystem services expecially cultural and ricreative ones





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Places/Entities

Municipalyties are involved in the authorization process (forest cuts in coppice or high forest)

Under a surface of 3 hectares the process start with a simple communication of the owner that, after 60 days, become effective.





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Places/Entities

Counties/Provinces (sub regional administrations) are involved in the authorization process (forest cuts in coppice or high forest)

Above a surface of 3 hectares (till 9) the process start with a simple communication (with a project made by an Agronomist or Forest Engineer) of the owner that, after 60 days, become effective.

Above a surface of 9 hectares the process with the project become a real authorization (the Institution should say Y/N)



LAZIO



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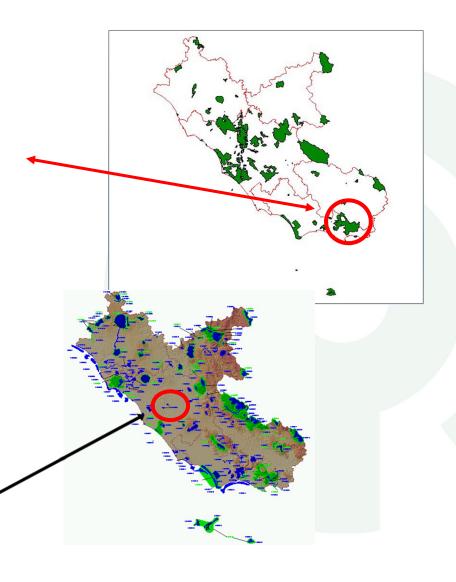
Places/Entities

Protected Areas are always (no surface limit) involved in the authorization process when forest cut is planned in the PA.

Regional Forest Authority is involved if the project is about and ancient wood or it wants change soil use or management system (from high forest to coppice)...

Regional Forest Authority is the Entity that approve the Forest Management Plans

Natura 2000 Regional Authority is involved in the authorization process when forest cut is planned in a N2K site or it's indirectly threatened (Appropriate Assessment).





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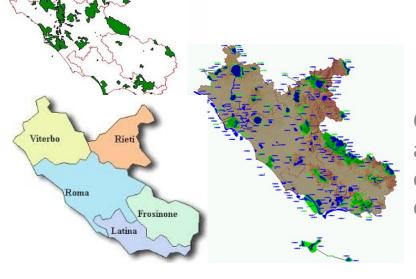




People

Municipalities lack of expertise /
skills in the forest sector
(sometime is different in the
biggest town)





Counties / Provinces (sub-regional administrations), PA and Regional Administration operate with staff formed by agronomists, forest engineers, biologists, geologists and naturalists

Freelance/consultants (Agronomist and Forest Engineer) as a planner, forest enterprises and forestry workers (chainsawer, tractor driver, etc.) as user, implementer are our best partners (in crime)



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At Regio level the options we normally put inside the authorization (and we would definetely get them mandatory) are about:

- in the old coppices (approx: 2 or 2,5 times over the normal round) different species arrives and makes the ecosystem more rich (biodiversity), interesting and resilient. The proposal solution is to change the management from coppice to high forest.
 - a more long round time for coppices foreseen in Forest Management Plans: from 16 to 20 years or more for oaks, from 14 to 22 24 years for chesnut, from 20 to 30 or 35 years for Quercus ilex or Ostrya carpinifolia and beech in the mountains area.
 - Choose trees silvyculture.
- propose other activities than clear cut to get to forest a different social and recreational value.
- in coppices, define a less number of stand but a more rich composition in species or choice groups of stand with shrubs and different trees species.





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Biodiversity conservation is specially secured by the Appropriate Assessment process.

In coppices during the planning the consultants marks standards of different species in rispect to the % of different trees distribution; the stands are respected during the clear cut by workers.

Shrub and bushes are also marked to be respected during the cuts (interest for feedding animals like *Rhamnus* for the bear or the conservation of lianas like *Hedera* on the stands).

These species richness is done to prevent disease and make woods more resilient.

















Forest Enterprises are interested in biodiversity conservation and the rules are observed for example in the case of single trees preservation or the keeping of small islands of wood (from 1,000 to 10,000 square meters).

Forest Enterprises only need a clear sign on the ground with the rules for making a right activity.

Enterprises helped by consultant during the past years increased the quantity of dead wood leave on the ground or standing because they learnt the lesson and in the same time the wood is unmarketable.



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Forest Enterprises have no problem in conservation of habitat trees and leave them as totem till their end of life.

Often forest workers let the border between wood and pastures uncutted to preserve vegetation for the breeding (shadow, repair and forage); in the same time they learn the lesson for conservation of amphibian along the river with a buffer zone.

Period for forest activities (cuts) is strictly limited by Conservation Misures in SCAs and SPAs and it is mandatory and accepted.





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WORK AT ANY LEVEL TO GIVE INFORMATION AND EDUCATION:

- DURING FOREST MANAGENMENT PLANS AUTHORIZATION PROCESS (MUNICIPALITY, CONSULTANTS);

DURING WORKSHOPS, MEETINGS, OF LIFE PROJECTS...(CONSULTANTS, ADMINISTRATIONS, ENTERPRISES) DURING MANDATORY EDUCATION (FOREST ENTERPRISES).....





IS THE ANSWER

(could be one of)



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