

Report from the 25th EVS Meeting

The 25th Meeting of the European Vegetation Survey was held the 6 – 9 April, 2016 in Rome, at the "Accademia dei Lincei", founded in 1603 by Federico Cesi, an impassioned researcher of natural sciences, especially botany. The name "Lincei", as due to the exceptional acuity gaze attributed to Lynx in nature. The meeting was organized by EVS members from Sapienza University of Roma (Dept. Environmental Biology) coordinated by Fabio Attorre, Emiliano Agrillo, Laura Casella (from Italian Institute for Environmental Protection and Research - ISPRA) and the Italian Botanical Society (SBI).

The total participants were 215, the largest ever attendance EVS meetings, with 34 countries represented, including Egypt, Australia, USA, China and Saudi Arabia. The scientific sessions of meeting comprised 65 talks in 9 sessions, 72 posters presented in 3 sessions and 2 invited lectures (Prof. Sandro Pignatti "400 Years Biodiversity" and Prof Francesco Spada "Anecdotal Geobotany Revisited").

The main topics of the meeting were focused on: present day phytocoenology and the legacy of the past; habitat typology and conservation (i.e. EUNIS, Natura 2000 and Habitat Red List); diversity of vegetation types; vegetation dynamics and methods of vegetation survey and analysis.

The workshop offered numerous opportunities also to present regional studies, different approaches on vegetation classification (Forests, dry grasslands, aquatic vegetation) and vegetation plots databases activities. Moreover some individual presentations reported progress in national vegetation survey programmes. This year during the EVS meeting, the meetings of the Vegetation Classification Working Group and the Group for Phytosociological Nomenclature were hosted, and. spontaneous round tables were conducted about several thematic topics (e.g. comparison of national experiences regarding problems concerning the interpretation of the Habitat types of the Annex I of the Habitat Directive and the repercussions on their conservation within the member countries).

Excursion

A full-day visit to the Presidential Estate and Residence in Castelporziano was conducted. The field excursion was guided by Francesco Spada and additional support was provided by Emiliano Agrillo, Fabio Attorre, Laura Casella, Marco Massimi, Marta Gaia Sperandii, Anna Testi. "Tenuta di Castelporziano" is the Estate and Residence of the President of The Italian Republic. It has status of National Nature Reserve and belongs to the European Network Natura 2000. Formerly Royal Hunting Park, this 5800 hectares large area is located south of Rome. It stretches from the south suburbs as far as to the Tyrrhenian shore-line and represents the last, extant example of an earlier forest landscape of the Roman "Campagna" before



the sprawl of urban areas during the second part of the XX century. It offers a 12 km long transect through quite well preserved woodland sites, from the sand dunes of the seashore to inland. Coastal stands of evergreen broadleaved Mediterranean forest and maquis, deciduous planar mixed forests and stands of temperate hygrophilous forests in periodically flooded depressions, are scattered along a well-preserved zonal sequence.

Large pasturelands and impressive plantations of Mediterranean pines (*Pinus pinea*), document a long history of the traditional human impact. As last extant fragment of the former landscape of the Roman Campagna, it exhibits spectacular examples of the zonal, extrazonal and azonal forest communities at these latitudes in peninsular Italy. The last two centuries of management as hunting domain for the local aristocracy provided a relatively low degree of deforestation for cultivation and pastoralism, in comparison to adjacent districts. Thereafter, up to modern times, the area was mainly exploited by forest pastoralists. The extant large forest stands, despite a long history of exploitation by selective cutting (coppice), grazing and patchy clear cutting for temporary cultivation of cereals, which heavily affected the vertical and spatial structure of the woodland, still exhibit a high species richness, suggesting high resilience and persistence of an aboriginal species pool.

The territory is relatively flat and spans over a planar morphology shaped by marine sand deposits from Pliocene to Holocene. A more diverse morphology with tabular, rolling hills dissected by stream valleys, characterizes the northern westernmost part of the area, at the edge of the deposits of the Pleistocene eruptions of the Albano Volcano.

Its botanical interest relies upon the extraordinary diversity of the local flora and vegetation, concentrated in a small area where relictuality and altitudinal disjunctions, originated by conditions of local high water table, due to the planar morphology, are displayed within a Mediterranean macroclimatic envelope.

Here the sand dunes are locally well preserved, the classic topographical zonation of halo- and psammophytic plant communities of the Mediterranean seashore is displayed along the topographical gradient of the Holocene sand dunes. Close to the sand dunes, the biome of the broadleaved evergreen Mediterranean forest is zonal, as it is all along the Tyrrhenian coast independently from the soil. It is represented by a sequence of woody communities of increasing height due to the disturbance of the marine aerosol. A first fringe of pigmy forest dominated by *Juniperus macrocarpa* develops both on inland dune slacks as well as at the top of the consolidated dunes. Slightly more inland, the stands are dominated by *J. phoenicea* which develops a more persistent canopy. The populations of this species are likely to represent a local late successional stage. In this highly dynamic belt, exposed to wind-blow and aerosol, which affect the growth of



closer stands of woodland, a steady displacement of this mode of species aggregation occurs.

Locally more or less transeunt scrub communities (garrique) dominated by Cistaceae and Rosmarinus develop at the transition between the consolidated dunes and the woodland. Remnants of a more thermophilic thicket of Angiosperm treelets, analogue to the Olea and Ceratonia aggregations recorded along the coast south of this area, can be seen in the individuals of Chamerops humilis scattered in more open sites. A dense thicket of low, bent and twisted individuals of Q. ilex develops upstream of the first consolidated dunes. Its physiognomy changes along with the distance from the sea shore, first achieving the vertical structure of a real broadleaved evergreen Mediterranean sclerophyllous forest behind the dunes. Smaller polycormic trees (Arbutus unedo, Phillyrea latifolia, Erica arborea, Rhamnus alaternus, Myrtus communis, Pistacia lentiscus) are either successional or concentrated in openings where also swags of lianas (Smilax aspera, Hedera helix and Clematis flammula) often occur. Daphne gnidium apparently coexist in stands where individual of Q. suber enter the canopy. Carex distachya, Cyclamen repandum, Rubia peregrina are the most common species in the scanty ad poor flora at the forest floor.

Old growth stands of this evergreen forest grow on the ruins of the settlements of Via Severiana, running along the ridge of a fossil, levelled dune. This suggests interesting inferences on the time span of a succession leading to a close-toclimax forest canopy. In periodically inundated hollows fringed by *Scirpus holoschoenus* and *Juncus inflexus*, stands of *Populus canescens* and *Fraxinus angustifolia* subsp. *oxycarpa* are clustered. A mixed deciduous-evergreen planar forest dominates the landscape on the inland tablelands. Its structure is due to the co-dominance of *Quercus frainetto* and *Q. cerris* in the late successional canopy, the former apparently favoured by the planar morphology in which layers of clay in the volcanic deposits provide moderate waterlogging. *Carpinus orientalis* usually builds a continuous lower layer of partially clonal origin. On drier patches, *Q. suber* and more seldom Q. ilex reach the canopy, along with an understorey of evergreen treelets. This aggregation can be suggested as the earlier dominant forest cover in the Roman Campagna before the deforestation of historical times.

Emiliano Agrillo Fabio Attorre Laura Casella



Pictures



Photo 1 - EVS welcome Fabio Attorre and Milan Chytry (by Rense Haveman)



Photo 2 - Sandro Pignatti (by Milan Chytry)





Photo 3 - EVS Social Dinner (by Rense Haveman)



Photo 4 - EVS participants (by Gianmaria Bonari)





Photo 5 – Holocene sand dunes with classic topographical zonation of halo- and psammophytic plant communities of the Mediterranean seashore (by Laura Casella)



Photo 6 - EVS as meeting point of old friends (by Liene Aunina)



Photo 7 - Francesco Spada (excursion leader) during the trek in the "Tenuta di Castelporziano" (by Milan Chytry)



Photo 8 - EVS breaks during the sessions (by Li Mari)



Photo 9 - Garden in the Presidential Estate and Residence in Castelporziano (by Emiliano Agrillo)



Photo 10 – Site periodically inundated fringed by Scirpus holoschoenus and Juncus inflexus, stands of Fraxinus angustifolia subsp. oxycarpa and Quercus robur are clustered (by Emiliano Agrillo)





Photo 11 – EVS excursion trek, in a mixed deciduous-evergreen planar forest. Its structure is due to the co-dominance of *Quercus frainetto* and *Q. cerris* in the late successional canopy and the understorey layer dominated by *Carpinus orientalis* (by Meme Herrera Gallastegui)





Photo 12 - Medicago marina L. (by Emanuela Carli)





Photo 13 - Silene canescens Ten. (by Meme Herrera Gallastegui)



Photo 14 – Juniperus oxycedrus L. subsp. macrocarpa (Sibth. & Sm.) Neilr. (by Meme Herrera Gallastegui)