The 9th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (MMV9)

- Place, recreation and local development. -
Bordeaux, France, August 29-31, 2018

Program
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Program

Credits:
Layout Philippe Camoin - Grégory Lambert
Infographics Philippe Camoin
WELCOME

It is our pleasure to welcome you to the 9th international Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (MMV9) with a program including keynote speeches, organized and poster sessions, a half-day field trip, social events and post conference trips.

This is the first time that France has hosted an MMV Conference. Our country is ranked as the world’s top tourist destination, thanks largely to its culture, art, and gastronomy, as well as popular cities such as Paris and Bordeaux. On the other hand, France’s potential as a destination for outdoor recreation and nature-based tourism is not hugely publicized, despite its many unique features in this respect: varied climate and natural assets (shoreline, mountains, lakes, and forests), large expanses of countryside, and a network of protected natural areas, to name but a few. France’s protected areas are often free to access for the general public.

However, in contrast with other countries, nature conservation in specific areas is much less widespread. Where it does take place, it is often centered on territories that are perceived to be “attractive”, and where many conflicting activities are practiced. This may be one of the reasons why contractual tools and regional park systems are quite popular in France. The MMV Conference offers an excellent opportunity to discuss the situation in France in greater depth.

The theme proposed for the conference was “recreation, place and local development”. This reflects our assumption that recreational areas are not just physical assets designed to receive visitors for the purpose of leisure - which in itself would already be something of great importance. They reflect deeper social phenomena, as demonstrated through the range of MMV9 parallel sessions dedicated to discussing questions such as environmental education and economic development, social integration, community resilience, environmental justice, and health. The traditional topics covered by MMV Conference also reflect an evolving society: with innovations in monitoring techniques (both on people and nature), focus on new populations (Y generation, ethnic minority) and a larger concern for individual engagement and participative management.
The 9th edition of MMV is co-hosted by Irstea and BSA. This would not have been possible without significant contributions from a large number of additional partners and sponsors as well as our national scientific and organizing committees. We would like to take this opportunity to thank everyone for their help.

After two years of planning, we are proud to announce that we have more than 160 presentations from 30 countries, meaning that the conference will host over 200 participants from across the globe. We are honored that the International Steering Committee has given us the opportunity to be part of this great MMV community, which organized its first meeting in 2002. We hope you will enjoy the conference as much as we enjoyed organizing it.

If you can’t be with us in person, we hope that you will enjoy reading our publications.

All the very best from the organizing committee.

Jeffrey Dehez
Chair of MMV9
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Irstea is a public institution under the dual auspices of the Ministries of research and agriculture and which works in close collaboration with the Ministry of ecology. Irstea is conducting an environmental research aimed at meeting three major societal challenges: sustainable management of water and territories, prevention and anticipation of natural risks and environmental quality.

Perfectly integrated into the French and European research landscape, the institute develops action-oriented research programmes in support of government policies involving strong partnership with universities, research organisations, economic players and decision makers.

Certified “Institut Carnot” since 2006, Irstea is present in about 10 competitiveness clusters and is currently developing 146 research contracts with industrialists and SME’s in 2017.

With a global budget of 109 million €, including 24% of own resources, Irstea has 1200 employees, including 869 scientists distributed across 9 centres in France and 19 research units.

Irstea is a founding member of AllEnvi, the National Alliance for Environmental Research, and the European PEER (Partnership for European Environmental Research) network.
Bordeaux Sciences Agro, Institute of Agricultural Sciences, is a public institution under the authority of the French Ministry of Agriculture, that offers higher education and carries out research and technology transfers – bringing technologies to the marketplace. Among 12 other similar institutions, Bordeaux Sciences Agro is part of a larger network of higher education establishments in agricultural and veterinary sciences, called Agreenium.

Through its activities of teaching, research and valorization of scientific knowledge, Bordeaux Sciences Agro participates in current issues of agriculture, agroecology, feed-and-food science, forestry and wood management. Bordeaux Sciences Agro: 580 students, 435 of whom are engineers, 140 staff, 42 of whom are teaching research staff, and a 17ha campus.

The courses offered by our institution cover the main curriculum of an engineer, but also continuing education and apprenticeships, all leading to qualified jobs in the agronomic and life sciences sector.

The teaching research staff and the scientists of Bordeaux Sciences Agro work within 12 joint research units, in collaboration with several universities in Bordeaux, and also with research institutes like INRA, Irstea, CNRS or Inserm. Their thematic fields of research fit today’s major issues: the ecology of agrosystems, influence of human actions on the environment, how nutrition impacts human health, precision agriculture or sustainable management of local territories...

For 50 years, Bordeaux Sciences Agro has been able to forge privileged relationships with companies. These ties supplement the courses offered by our institution by helping increase the professionalism of the subjects taught and by fostering the professional futures of the graduates by ensuring that the courses are suited to the real world.
Commitees organisation

**MMV9 Local planning committee**

- Jeoffrey Dehez (chair of the conference), Irstea Bordeaux
- Lambert Gregory (co-chair), Irstea Bordeaux
- Ludovic Ginelli (co-chair), Irstea Bordeaux
- Kaouther Ben hadj abdallah, Irstea Bordeaux
- Clarisse Cazals, Irstea Bordeaux
- Philippe Camoin, Irstea Bordeaux
- Annabelle Decombe, Bordeaux Sciences Agro
- Gabrielle De Almeida, Irstea Bordeaux
- Zoe Ginter, Irstea Bordeaux
- Camille Herbreteau, Irstea Bordeaux
- Fattallah Kerouaz, Irstea Bordeaux
- Catherine Rodriguer, Irstea Bordeaux
- Antoinette Rolin, Bordeaux Sciences Agro
- Stéphanie Touvron, Irstea Bordeaux

**MMV9 Local scientific committee**

- Dr Jeoffrey Dehez (Chair of the conference), researcher, economics, Irstea Bordeaux
- Dr Jean-Pierre Augustin, professor, geography, Bordeaux University
- Dr Olivier Bessy, professor, sociology, Pau University
- Dr Christophe Bochet, researcher, economics, Irstea Bordeaux
- Dr Clarisse Cazals, researcher, economics, Irstea Bordeaux
- Dr Valérie Deldrève, researcher, sociology, Irstea Bordeaux
- Dr Emmannuelle George, researcher, planning, Irstea Grenoble
- Dr Ludovic Ginelli, researcher, sociology, Irstea Bordeaux
- Dr Christophe Guibert, associate professor, sociology, Angers University
- Dr Jean-Bernard Marsat, researcher, management, Irstea Clermont-Ferrand
- Dr Clémence Perrin-Malterre, associate professor, sports, Savoie Mont Blanc University
- Dr Ingrid Peuziat, associate professor, geography, Bretagne Occidentale University
- Dr Mbolatiana Rambonilaza, researcher, geography, Irstea Bordeaux
- Dr André Suchet, associate professor, sports, Bordeaux University
- Dr Stéphanie Truchet, researcher, economics, Irstea Clermont-Ferrand
- Dr Luc Vacher, associate professor, geography, La Rochelle University
MMV International steering committee

- Tetsuya Aikoh - Hokkaido University, Japan
- Arne Arnberger - University of Natural Resources & Applied Life Sciences, Austria
- Robert Burns - University of West Virginia, USA
- Don English - United States Department of Agriculture – Forest Service, USA
- Peter Fredman, Mid-Sweden University, Östersund, Sweden
- Martin Goossen - Wageningen University and Research Centre, Alterra, The Netherlands
- Marcel Hunziker - Institute for Forest, Snow & Landscape Research, Switzerland
- Yu-Fai Leung - North Carolina State University, USA
- Teresa C. Magro Lindenkamp - University of Sao Paulo, Brazil
- Robert E. Manning - School of Natural Resources, University of Vermont, USA
- Andreas Muhar - University of Natural Resources & Applied Life Sciences, Austria
- Catherine Pickering - Griffith University, Australia
- Ulrike Pröbstl - University of Natural Resources & Applied Life Sciences, Austria
- Mart Reimann - University of Tallinn, Estonia
- Dominik Siegrist - University of Applied Sciences Rapperswil, Switzerland
- Liisa Tyrväinen - Natural Resources Institute Finland
### Program overview

#### Tuesday, August 28th

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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>14:00-17:00</td>
<td><strong>Preconference workshop - Amphi Sylvae (1):</strong> «Systematic Quantitative Literature Review» Catherine Pickering, Griffith University, Australia</td>
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<tr>
<td>18:00-21:00</td>
<td>Welcome reception, preregistration, Bremontier Hall (1)</td>
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#### Wednesday, August 29th

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>08:30-9:30</td>
<td>Registration, Bremontier Hall (1)</td>
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<td>09:30-10:00</td>
<td><strong>Opening session - Grand Amphi (2),</strong> Jeoffrey Dehez, Irstea Bordeaux, Chair of MMV9 Sophie Thoyer, Irstea, Land Use Departement Director Olivier Lavialle, Bordeaux Sciences Agro Director</td>
</tr>
<tr>
<td>10:00-11:00</td>
<td><strong>Keynote - Grand Amphi (2):</strong> «Outdoor, conservation and environmental inequalities» Cécilia Claeys, Aix Marseille University &amp; Valérie Deldreve, Irstea Bordeaux France</td>
</tr>
<tr>
<td>11:00-12:00</td>
<td><strong>Keynote - Grand Amphi (2):</strong> «Recreational Transition and management of protected areas. The Cultural turn ?» Philippe Bourdeau, Institute of Alpine Geography, Grenoble University &amp; Jean Corneloup, UFR STAPS - Clermont-Ferrand university, France</td>
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<tr>
<td>12:00-13:00</td>
<td>Lunch, Bremontier Hall (1)</td>
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<td>13:00-15:15</td>
<td>Parallel sessions</td>
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<tr>
<td>15:15-16:15</td>
<td>Refreshments (1) + Posters session (5)</td>
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<td>16:15-18:30</td>
<td>Parallel sessions</td>
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<td>18:30-20:00</td>
<td>Wine testing - Quercus room (1)</td>
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#### Thursday, August 30th

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<th>Time</th>
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<tr>
<td>08:30-10:45</td>
<td>Parallel sessions</td>
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<tr>
<td>11:30-22:00</td>
<td>Field trip (incl. lunch, refreshements and dinner)</td>
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Friday, August 31st

08:30-10:45 Parallel sessions
10:45-11:00 Refreshment
11:00-12:00 **Keynote - Grand Amphi** (2):
«Beyond recreation experience and expenditure: Well-being and resilience in natural area-human community system»
Kreg Lindberg, Oregon State University, U.S.A.
12:00-13:00 Lunch, Bremontier Hall (1)
13:00-15:15 Parallel sessions
15:15-15:30 Refreshment, Bremontier Hall (1)
15:30-17:45 Parallel sessions
18:00-18:30 Closing sessions, awards
20:00-24:00 Conference dinner, Château Luchey Halde

Saturday, September 1st

Sunday, September 2nd

Post conference field trips
Post conference field trips
## Parallel Sessions

<table>
<thead>
<tr>
<th>Parallel Sessions 1</th>
<th>Date/Time</th>
<th>Sylvae (1)</th>
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<tr>
<td><strong>Sylvae</strong></td>
<td>Wednesday, August 29&lt;sup&gt;th&lt;/sup&gt; 13:00-15:15</td>
<td>New methods for monitoring and management of visitors in recreational and protected areas: lessons learned, benefits and concerns (1/2)</td>
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<td>Parallel Sessions 2</td>
<td>Wednesday, August 29&lt;sup&gt;th&lt;/sup&gt; 16:15-18:30</td>
<td>New methods for monitoring and management of visitors in recreational and protected areas: lessons learned, benefits and concerns (2/2)</td>
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<td>Poster sessions</td>
<td>Wednesday, August 29&lt;sup&gt;th&lt;/sup&gt; 15:15-16:15</td>
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<tr>
<td>Parallel Sessions 3</td>
<td>Thursday, August 30&lt;sup&gt;th&lt;/sup&gt; 8:30-10:45</td>
<td>Marine protected areas – new requirements for visitor monitoring and management?</td>
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<tr>
<td>Parallel Sessions 4</td>
<td>Friday, August 31&lt;sup&gt;st&lt;/sup&gt; 8:30-10:45</td>
<td>Post-data collection uses of visitor monitoring data (1/2)</td>
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<tr>
<td>Parallel Sessions 5</td>
<td>Friday, August 31&lt;sup&gt;st&lt;/sup&gt; 13:00-15:15</td>
<td>Post-data collection uses of visitor monitoring data (2/2)</td>
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<td>Parallel Sessions 6</td>
<td>Friday, August 31&lt;sup&gt;st&lt;/sup&gt; 15:30-17:45</td>
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<tr>
<td>Time</td>
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<tr>
<td>Wednesday, August 29th</td>
<td>Participatory planning for nature-based tourism and place-making</td>
<td>MEF 1 (3)</td>
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<td>Why Count? Best practices in the field of data collection to preserve and manage natural areas (1/2)</td>
<td>MEF 2 (4)</td>
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<td></td>
<td>Recreation Ecology and Sustainability</td>
<td>Amphi A (5)</td>
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<td>Regional parks and territorial organizations for sustainable development</td>
<td>MEF 1 (3)</td>
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<td>Why Count? Best practices in the field of data collection to preserve and manage natural areas (2/2)</td>
<td>MEF 2 (4)</td>
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<td></td>
<td>Outdoor sports and environmental controversies</td>
<td>Amphi A (5)</td>
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<td></td>
<td>Managing Visitors in Iceland’s Recreational Areas</td>
<td>MEF 1 (3)</td>
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<td>Nature-based tourism trends, markets and innovative products</td>
<td>MEF 2 (4)</td>
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<td></td>
<td>Nature based integration</td>
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<td>Interpretation as a tool for connecting visitors to and managing visitors in protected areas</td>
<td>MEF 1 (3)</td>
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<td>Monitoring of outdoor recreation on national level – method updates and challenges</td>
<td>MEF 2 (4)</td>
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<td>Environmental effort in recreational and protected areas at risk from inequality</td>
<td>Amphi A (5)</td>
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<td></td>
<td>Place based knowledge and environmental engagement</td>
<td>MEF 1 (3)</td>
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<td>Outdoor Economics 1 Contributions to the Economy</td>
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<td>Trail running and sporting events in protected areas: Progress on research and management</td>
<td>Amphi A (5)</td>
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<td></td>
<td>Preferences and representations of nature</td>
<td>MEF 1 (3)</td>
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<td></td>
<td>Outdoor Economics 2 Markets, values and organizations</td>
<td>MEF 2 (4)</td>
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<td></td>
<td>Outdoors, health and wellness</td>
<td>Amphi A (5)</td>
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Valérie Deldrève is senior researcher in sociology at Irstea Bordeaux. A large part of her researches deals with the environmental inequalities connected to Nature conservation. She studies the accessibility and the uses of the protected natural areas and resources through the prism of Environmental Justice.

She will co-present with Cécilia Claeys a plenary session entitled «Recreational uses through the prism of Environmental Justice».

Cécilia Claeys is associale professor, sociologist at Aix-Marseille University - LPED. Environmental sociologist, her researches articulate public policies, public perception and socio-technique controversies analyses. Her main research issues are: protected natural areas, coastal risks, invasive species.

She will co-present with Valérie Deldreve a plenary session entitled «Recreational uses through the prism of Environmental Justice».

Jean Corneloup is a senior lecturer at the UFR STAPS (Clermont-Ferrand) and a researcher with the PACTE research group on territories (Grenoble). His research focuses on the analysis of outdoor sports culture in relation with rural development. He is president of the network of researchers and experts on outdoor sports and editors-in-cherf of the Nature & Récréation journal.

He will co-present with Philippe Bourdeau a plenary session entitled «Recreational Transition and management of protected areas. The Cultural turn ?».
Philippe Bourdeau is a full professor of cultural geography at the Institute of Alpine Geography (Grenoble University). He conducts research on recreation practices (PACTE research group). He is interested in the meaning of “elsewhere” in contemporary societies, critical approaches in tourism, and recreational dissent. He co-represents France within the International Scientific Committee on Research in the Alps (ISCAR) and is President of Journal of Alpine Research / Revue de Géographie Alpine.

He will co-present with Jean Corneloup a plenary session called «Recreational Transition and management of protected areas. The Cultural turn ?».

Kreg Lindberg is an associate professor at Oregon State University. He teaches in the areas of tourism and recreation, sustainability, and research methods. He conducts research in subjective well-being, resilience, tourism, and social science aspects of natural resource management. Kreg has a Ph.D. in forest social science with a minor in economics from OSU, a masters in international relations from the Johns Hopkins University School of Advanced International Studies, and a bachelors in history from Dartmouth College. He has worked in 15 countries on 6 continents. He will present a plenary session entitled «Beyond recreation experience and expenditure: Well-being and resilience in natural area-human community systems».

Catherine Pickering is an academic in the School of Environment at Griffith University, Australia with > 250 publications, including >120 peer-reviewed papers. She is botanist, ecologist and environmental scientist. Mrs Pickering’s research interests include: alpine ecology, climate change, recreation ecology, managing visitors in protected areas, biodiversity conservation, human mediated seed dispersal and community garden.

Catherine will give the preconference workshop on Systematic Quantitative Literature Review.
Field trips

Field trips, excursions and social events

Mid-conference tours will be organised on August 30th. These will involve a half-day excursion to natural areas in the vicinity of Bordeaux with various activities depending on the group. To ensure the best quality of the tour, the conference delegates will be divided into two groups (hereafter called «South □» and «North Δ») and will visit different destinations and conduct various activities. Both tours are of equal quality. They are included in the conference fees. You will receive information about your group upon registration.

Field trips have been chosen to provide the clearest possible image of the local context. This will be is also an occasion to focus on some of the specific characteristics of French management systems. In Nouvelle Aquitaine, nature conservation does not take place in isolated and extensive areas. It is centered on very attractive territories that have undergone important socioeconomic changes. The management of recreational areas much be designed accordingly, e.g. on a “territorial basis”.

Our trips will thus provide opportunity to stress out the multistakeholder character of the management processes. Participants are invited to bring good walking shoes (easy walking) and to be dressed for outdoor activities. We will meet at the parking bus (within Bordeaux Science Agro facilities), a short moment after the last sessions ends. Participants will be supplied a picnic basket. Buses will bring back the participants to the BSA conference site (around 10-11 PM).
The conference dinner will be held in the Luchey-Halde Chateau, which is owned and managed by Bordeaux Science Agro. The Chateau is ideally located on 29 hectares of exceptional land at the center of the renowned appellation, Pessac-Léognan.

This estate provides students studying the wine industry with an exceptional working tool, and beautifully showcases the school’s know-how and commitment.
The **State forests of Lège et Garonne** are managed by the French National Forestry Office (Office National des Forêts - ONF). The ONF is responsible for all state-owned forests in France, which account for over 25% of all the country’s forests. This represents over 10 million hectares of land, of which 4.7 million hectares are in mainland France, with the remainder spread across France’s overseas territories. Management of these forests focuses on the three “pillars” of sustainability: wood production, environmental protection, and dealing with visitors. The ONF works to prevent natural risks, and carries out ecological work in areas sensitive to geological and climate-based issues.

**L’ONF – A KEY PARTICIPANT IN PROTECTING THE AQUITAINE COASTLINE**

The ONF is a leader in protecting coastal areas in the Nouvelle Aquitaine region. They are responsible for more than 80% of sandy areas, including 250km of coastline in Aquitaine and 70km in Charente-Maritime.

The ONF monitors and maintain the areas surrounding the dunes on France’s Atlantic coast. They use special “soft” techniques which take into account the constant movement of dune ecosystems.

**ESSENTIAL SUSTAINABLE MANAGEMENT, CONSTANTLY CHANGING TO PROTECT COASTAL FORESTS AND THEIR ECOSYSTEMS**

This fragile balancing act is based on 4 key principles:
- Preventing natural risks
- Protecting biodiversity
- Outdoor recreation
- Sensible use of natural resources

ONF’s “coastal mission” brings together a network of people and resources, promoting dialogue between scientists, technical specialists, and elected representatives. They are extensively involved the EUCC initiative, as well as the Aquitaine coastal public interest group.

For over 20 years, ONF has worked in close cooperation with BRGM (Geological research organisation), as part of the Aquitaine Coastal Observatory (OCA), which monitors erosion and submersion throughout the Aquitaine region, with funding from FEDER, and local authorities in the Gironde, Landes, Pyrénées-Atlantiques, and Arcachon. The OCA provides decision and management support tools to deal with constantly evolving natural areas throughout the region.

The ONF is also a member of the coastal public interest group, which since 2009 has brought together a number of regional authorities on the Aquitaine coast. The aim of GIP Littoral is to protect and raise awareness of the fragile natural environments located along the coastline.
Can you tell us about your job in a few words?

ONF is responsible for managing and protecting forests belonging to the State and local authorities. We sustainably manage around 60,000 hectares of forest all along the Nouvelle Aquitaine coastline, stretching for over 230 km. The key parts of our job are renewing the forests for the benefit of future generations, producing bio-sourced wood, protecting biodiversity, welcoming visitors, and regulating the ways in which people use the forests.

What are the main issues relating to visitors management?

There are four main issues linked to this coastal and peri-urban forests:

- Regulating and moderating visits to minimise impacts on the ecosystem.
- User safety and liability of forest owners. This is becoming more and more important in our increasing litigious society.
- Acceptance and understanding of our management activities among urban visitors, which calls for a greater level of mediation between civil society and forest managers.
- Financing the costs of welcoming visitors (preparation and cleaning work, reduced income, etc), which calls for new funding strategies.

What is your fondest memory of welcoming visitors to your forests?

Creating adapted areas for disabled people, with help from local authorities.

How do you think these issues will develop over the next ten years?

They will become ever more poignant, as forests become more attractive for rest and relaxation. This growing social demand for green spaces calls for more thought to be given to the need for greater solidarity between the rural and coastal areas where forests are located and the urban areas from which visitors emanate.
Known for its huge size, the Pilat Dune is also famous for the beauty and diversity of its natural environment.

It is located at the entrance of the Arcachon Bay. With 2 million visitors, the fragile and vulnerable Pilat dune is the most frequented natural site in Nouvelle-Aquitaine. This is why the Syndicat Mixte is conducting a vast sustainable development project and long-term management plan within the Operation Grand Site framework.

Operation Grand Site is an original French policy tool for a state subsidy approach to local authorities in response to the challenges posed by welcoming such numbers and maintaining such frequently visited classified sites.
**Maria De Vos** (Director of Pilat Dune Grand Site)

**Could you tell us about your job in a few words?**

Managing a major site like this involves a lot of nature conservation. I am also responsible for handling large numbers of visitors, as would be expected for a renowned destination such as ours. My responsibilities also cover budgets and other admin work related to sites run by French local authorities.

**What are the main issues relating to visitors management?**

We have over 2 million visitors per year. The key thing for us is to treat each of them as a person and not just a statistic. By doing this, we ensure that people understand the true beauty of the site, meaning that they are more likely to treat it with respect. By educating our visitors, we make them active participants in our conservation efforts.

**What is your fondest of memory of working at the Dune du Pilat?**

In May 2016, with the help of the French fire service, we made it possible for a group of disabled adults and children to climb to the top of the dune.

**How do you think issues relating to visitors will develop over the next ten years?**

We need to update the ways in which tourism is developed in the area. The quality and management of natural spaces will be decisive factors in their future attractiveness. We have to look at the place occupied by tourism in our local economy, and examine how our site meets the expectations of an increasingly metropolitan visitor base. These people don’t just want to see a place. They want to experience it.
**Domaine de Certes et Graveyron** covers 395 hectares between marshland and the Arcachon bay. It was originally created in the 18th century to produce salt, then given over to fish farming in the 19th century.

It consists of a vast patchwork of seawalls, fish ponds, and wetlands with abundant wildlife, attracted by the calm setting and food resources. The Conservatoire du Littoral acquired these polders in 1984, to preserve their natural and cultural heritage and open them to the public. Since 1991, the Gironde department General Council is responsible for this vast Domaine.

The Domaine is open to the public year-round, free of charge. It is a popular destination, attracting over 130,000 visitors each year.
Joackim Dufour (Mediator for discussions relating to sensitive natural environments.)

**Could you give us a brief description of what your job involves?**

I am responsible for the day-to-day running of our environmental awareness team, based at the Domaine de Certes. Our work is focused on three main sites, the Domaine de Certes, the Ile Nouvelle, and Hostens. We employ three full-time nature guides, two admin staff, and about ten seasonal guides who organise bespoke nature tours for the general public. My job also involves providing technical and financial assistance to nature education organisations.

**What are the main issues relating to visitors management?**

Awareness is on the rise among the general public, but there is still much work to be done, particularly in relation to biodiversity. What we are aiming to do now is get the public more involved in nature conservation.

**What is your fondest memory of your job?**

We gain a lot of satisfaction from seeing our nature guides progress and gain confidence in working with members of the public.

**How do you think issues relating to the general public are likely to develop over the next ten years?**

I feel certain that a gulf will open up between those members of the public who are genuinely concerned about protecting biodiversity and the environment, and those who wilfully ignore these issues. This will mean we will need to redouble our efforts in raising awareness among these groups.
**Le Teich - Bird reserve**

*Le Teich* bird reserve was opened to the public in the autumn of 1972. While its focus has shifted at various points in time, its overriding concern has always been to protect the reserve’s unique natural environment and wildlife. In 1989, ecotourism became a priority for the new municipality, in partnership with the Regional Natural Park of the Landes de Gascogne.

This culminated in the opening of the Bassin d’Arcachon Nature Centre. In the French system, a Regional Natural Park is an inhabited rural area that is nationally recognised for its valuable local heritage and landscape, but also for its vulnerability. Such parks are supported by extensive sustainable development plans allowing the protection and promotion of their resources.

A Regional Natural Park stands out from other protected areas not only due to the complementarity of its protection and development objectives, but also the voluntary commitment of all stakeholders. Teich Bird Reserve is first and foremost a place for members of the public who are interested intaking a closer look at the natural world.
Anne Julie Cazabeil *(Animation projects)*

**Could you tell us about your job in a few words?**

I am the activities manager for the Maison de la Nature, located close to the Arcachon basin. We are an environmental education center operating under the umbrella of the Gascogne Regional Natural Park. My job involves managing and organising visits for a wide variety of members of the public (typically two thirds children and one third adults). In 2017, we organised over 800 half-days of activities at a variety of sites, including the Teich bird reserve.

**What are the main issues relating to visitors management?**

We try to dedramatize the idea of “wild”, by positioning ourselves somewhere between old-fashioned and modern. We live in a consumer society, where nature is consumed in the same way as any other commodity. People are willing to pay, and they want value for money. They will go to almost any lengths to get it, without considering the effects this can have on natural environments. However, we have difficulty encouraging people to be militant when it comes to protecting the environment. People “consume” nature when they are surrounded by it, and are aware of the dangers posed to biodiversity, but that awareness is usually short-lived.

**What is your fondest memory of receiving visitors while working here?**

I love to see people admiring the landscape and animal life during one of our guided visits, particularly at sundown. They tell us that they feel a great deal of serenity.

**How do you think issues relating to visitors will develop over the next ten years?**

The issue of nature being seen as a commodity will continue to intensify. The challenge for us will be to combat this phenomenon, and to show how receiving visitors has both a cost and a benefit for society at large. There is a huge gulf between simply receiving visitors and actually protecting biodiversity. The former is just one tool and is not enough on its own. Many stakeholders are complacent when it comes to biodiversity and will accept small achievements. We must not rest on our laurels. Project managers and other people in authority are happy as long as there is a bit of good publicity or press coverage. However, in reality, this kind of thing barely scratches the surface of the true underlying problems.
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