



Factsheet 8

Example adaptation measures

For this phase:



To illustrate what adaptation measures are, here are some examples from the literature. For reference, these are not necessarily new innovative actions: they are often existing management actions or operations, but with the objective of adapting to climate change.

REDUCING NON-CLIMATIC ANTHROPOGENIC PRESSURES

- Reinforcing zones of non-intervention and peace and quiet
- Managing visitor numbers, monitoring, raising awareness
- Managing grazing to reduce its impact on vegetation
- Controlling invasive alien species
- Managing and limiting certain activities (fishing, tourism, etc.)
- Anticipating demands for new practices
- Reducing sources of pollution
- Restoring ecosystems,
- etc.

FACILITATING THE MOVEMENT/MIGRATION OF SPECIES AND HABITATS

- Creating / restoring ecological corridors in the protected area
- Creating corridors between protected areas and in the interdependence zone of protected areas (green infrastructures)
- Removing obstacles to movement (weirs in watercourses, barriers, rubbish, etc.)
- Improving the quality of pastoral (maintaining extensive practices), forestry (increasing non-intervention and biodiversity trees) and wetland (maintaining wetlands and peatlands) infrastructures in the immediate vicinity of the protected area,
- etc.

INCREASING THE DIVERSITY OF ENVIRONMENTS, ECOSYSTEMS AND LANDSCAPES

- Creating and maintaining mosaics of environments
- Opening forest clearings
- Maintaining herbaceous areas to avoid closing off environments,
- etc.

PROMOTING THE BIOLOGICAL DIVERSITY OF STANDS / POPULATIONS

- Diversification of forest stands in terms of species and practices (irregular forest, different age classes)
- Selection/choice of plants with genetic characteristics adapted to local environmental conditions
- Maintenance and reinforcement of corridors within the protected area

NB: Maintaining or increasing biological diversity requires diversified management practices (e.g. in forests: natural regeneration, even-aged open forest, continuous uneven-aged and open forest, renewal by enrichment with drought-resistant species, assisted species migration, etc.).

POPULATION MANAGEMENT

- Strengthening or selecting more resistant ecotypes
- Changes in interactions (facilitation, competition): for example, thinning to reduce competition
- Increasing/reinforcing populations by introducing or reintroducing species
- Increasing/reinforcing genetic diversity by introducing or reintroducing new genetically different individuals,
- etc.

ACTIONS TO REINFORCE / RELOCATE SPECIES AND HABITATS

- Assisted translocation of vulnerable species
- Strengthening populations of threatened species
- Restoring threatened and fragile habitats
- Creating favourable habitats to maintain and preserve rare and threatened species (e.g. ponds for amphibians),
- etc.

MONITORING AND IMPROVING KNOWLEDGE

- 🌿 Abiotic monitoring, particularly of climatic parameters and indicators relevant to monitoring climate change
- 🌿 Monitoring species or habitats to track their evolution
- 🌿 Phenological monitoring
- 🌿 Monitoring ecological processes and functionalities
- 🌿 Research programmes to be initiated, for example on the effects of climate change and the vulnerability of our natural heritage.
- 🌿 Strengthening monitoring of invasive alien species and preparing intervention procedures,
- 🌿 etc.

REDUCING DEMAND FOR WATER / IMPROVING THE WATER CYCLE

- 🌿 Hydrological improvements/maintenance in lagoons (cleaning channels, gates, etc.)
- 🌿 Dismantling hydraulic structures, allowing lagoons to evolve freely in the event of maritimisation
- 🌿 Reducing densities in forest stands
- 🌿 Changing forest plantations that require a lot of water
- 🌿 Changing management practices to adapt to water resources (e.g. grazing),
- 🌿 etc.

RISK MANAGEMENT

- 🌿 Flood management, restoration of river geomorphology, removal of embankments and high points
- 🌿 Preventing damage caused by coastal storms, restoring dunes and coastal wetlands
- 🌿 Fire management/prevention plan and fire action strategy

ADAPTING REGULATIONS / ACTING ON LAND

- 🌿 Introducing more adaptive regulations to meet new challenges, for example by regulating new practices or practices that have become problematic.
- 🌿 Monitoring land acquisition opportunities
- 🌿 Extending the perimeter of the protected area and/or creating new protected zones

TAKING PRACTICAL STEPS

- Anticipating changes in working conditions as a result of future climate conditions (e.g. staggering the summer tourist season in mountains; stepping up surveillance and policing during sensitive periods; adapting guard working hours and workloads according to 'peak periods' and 'off-peak periods;' shifting working hours in the event of heat waves, etc.).
- Training protected area staff in climate change, its anticipated impact on the protected area, new natural risks or risks exacerbated by climate change, etc.

RAISING AWARENESS/SHARING INFORMATION ABOUT YOUR ADAPTATION PROCESS/PREPARING FOR CHANGE

- Training nature leaders in climate change, its predicted effects and the landscapes and issues of tomorrow.
- Developing educational tools to explain climate change, its consequences for a protected area and the landscapes of tomorrow (awareness of the problem and acceptance of the inevitable changes) for different audiences (more institutional tools for local stakeholders, more entertaining tools for the general public, etc.)
- Developing events/times for reflection on the theme (e.g. running workshops to construct create climate reports, etc.)
- Preparing people to accept the loss of species and changes to landscapes linked to climate change



Put on your climate glasses at every opportunity: with the general public, with local stakeholders, with elected representatives, etc. Make a habit of talking about 'climate change and protected areas!'