\*Slide intro

\*clicB - In a protected area, the idea of environmental monitoring can take on different meanings, and it is important to clearly define the terms.

\*clicG - Let's start with inventory. To make it simple, the inventory is a census. It can be qualitative, as in "what species are present in my PA?" it can also be quantitative: "how many individuals of this species exist?"

\*clicB - The inventory needs to be made by using standardised methods, and is generally set in a limited timeframe. It is essentially a data provider, and isn't meant to answer a specific question - it is simply there to give information regarding the condition of the ecosystem at a certain point in time.

\*G - The basic information gathered from the inventory is of the presence/absence kind, like for example the existence of a given species at a specific place at a specific time.

\*clicB - Now let's talk about ecological monitoring. Monitoring in itself is based on a series of data collections repeated over time. It consists in systematically gathering useful pieces of information over time.

\*G - Monitoring has a specific goal and answers the following kind of question: "What is the condition of the park through the seasons?" It can also be introduced to compare the data we collect with a known standard.

\*clic - It can be a baseline condition for example, like the number of animals of a certain species per unit area, or in reference to a desired state: what would be the number of animals of this species if there was no hunting?

\*clicB - Here is another example; to measure the impact of fire, isolate a plot where the vegetation will be preserved and will serve as a reference that will allow to understand the evolution of several elements like the environment, the species, depending on the fire... This information will help to take relevant management decisions.

\*G - We can then quickly classify ecological monitoring in three categories:

\*clicB - Monitoring based on, let's say curiosity, referring to a type of monitoring essentially leaning to a better knowledge of the environment, without necessarily having a problem to solve

\*G - Mandatory monitoring, in other words the regular follow-up of indicators that are essential for management, like for example measuring the burnt surfaces in a park every year

\*B - Action-oriented monitoring whose aim is to solve a precise problem and is therefore developed specifically in relation to this problem, which is by the way not necessarily linked to a matter of daily management of the PA.

\*clicG – Ok, let’s move on to a different word and approach, the surveillance:

\*B – surveillance in this context covers two dimensions. The park surveillance can be an inventory program systematically repeated in order to provide a time series of measures. Surveillance consists in repeating the collection of data over time, with no preconceived idea on the evolution of the parameters that are being measured. Therefore, surveillance is essentially descriptive.

\*clicG - You can for example focus on gathering meteorological data in a park, and file them, keep them in the event of having to use them later on for research.

\*clicB - Surveillance also refers to the control of activities taking place in the park, like the fight against poaching.

\*clic - If this type of surveillance isn't directly linked to environmental monitoring, very often, the rangers also carry out ecological surveys during their patrols.

\*clicG - There is a small frontier between monitoring and surveillance, but the difference is real; monitoring has a specific goal, it answers a management problem. Surveillance may only be a process of collecting information that may or may not be used subsequently.

\*clicB - For example, the surveillance of a river can help to detect of variations in quantities of fish present over time. But if you are not looking at a particular species, you won't be able to link these variations to the diet of the white-cheeked otter living in this river.

\*clicG - Last but not least, let's look at research.

\*B - A research program is based on a starting assumption and aims at validating it after having processed data and analysed results. Part of it can be experimental and take a step back from the data collected on the field.

\*clicG - Research is a main component of the management scheme but goes beyond the sole needs in management of the PA. It encompasses not only monitoring, but also allows a better understanding of the way the site is run.

\*clicB - For instance, the drop in fertility of swallows can be observed in the course of a multi-year environmental monitoring program, but it is by specifically studying the diet of these birds that we are able to see that the problem can be pin-pointed to the use of certain pesticides.

\*G – In brief, the ecological monitoring of a protected area consists in following the values of the territory in a methodical way, over time and with a specific goal.

\*clicB - It gives information about the condition of the protected area in the course of time, and is hence in a position to guide the site management.