MODULE 3: CONSERVATION STRATEGIES

PRACTICUM: MONITORING & ADAPTIVE MANAGEMENT

EXERCISE I:

The campus of the Forestry Training Institute is a dynamic ecosystem that requires management. For one of the following general management goals, develop at least three specific management actions:

(1) Reforest selected cleared areas to pre-disturbance forest conditions.
(2) Minimize the establishment and spread of undesirable non-native plants.
(3) Maintain clean drinking water supplies.

EXERCISE II:

Describe (either in written form or orally to a small group of peers) a conservation management program with which you have been involved or are familiar with. Share the details of the problem(s) you were/are trying to address. Formulate specific management objectives consistent with the general management goals for the project. How might the outcomes of these projects be different if objectives are clearly specified in the beginning? If they are not?

EXERCISE III:

Which of the following are management versus monitoring objectives? What's missing (if anything) from each?

Statements:

I. Increase presence of native plant species in the impacted zone by 2020.

II. Maintain chimpanzee populations at Grebo-Krahn and Gola Forest National between 2019 and 2021.

III. Monitor river pollution to evaluate different prevention methods.

IV. Recover forests in Block XY of Sapo National Park.

V. Increase suitable chimpanzee habitat by 1000 hectares.

EXERCISE IV:

Below are listed actual monitoring objectives being implemented by the US National Park Service to help track biodiversity on their lands. Consider that you are about to enter the field and begin to implement monitoring efforts in support of these objectives. Do you have enough direction to proceed? If not, how would you sharpen these objectives?

1. Determine long-term trends in species composition and community structure (e.g., cover, density by height class of woody species) of selected plant communities.
2. Determine long-term trends in the number of XYZ species in selected study areas.
3. Determine annual nesting success of breeding raptors as measured by territories occupied, number of chicks produced and number of chicks fledged.
4. Determine annual status and trends in the areal extent and configuration of land-cover types on parklands.
5. Determine long-term changes in frequency and extent of insect and disease outbreaks.