CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE
ESPECIALLY AS WATERFOWL HABITAT
CONVENTION RELATIVE AUX ZONES HUMIDES D'IMPORTANCE INTERNATIONALE
PARTICULIEREMENT COMME HABITATS DES OISEAUX D'EAU
CONVENCION RELATIVA A LOS HUMEDALES DE IMPORTANCIA INTERNACIONAL
ESPECIALMENTE COMO HABITAT DE AVES ACUATICAS

KUSHIRO,
JAPAN / JAPON
9-16 VI 1993

VOLUME II / VOLUMEN II

CONFERENCE WORKSHOPS
ATELIERS DE LA CONFERENCE
TALLERES DE LA CONFERENCIA

PROCEEDINGS
OF THE FIFTH MEETING OF THE CONFERENCE OF THE CONTRACTING PARTIES

PROCES-VERBAUX
DE LA CINQUIEME SESSION DE LA CONFERENCE DES PARTIES CONTRACTANTES

ACTAS
DE LA QUINTA REUNION DE LA CONFERENCIA DE LAS PARTES CONTRATANTES

RAMSAR CONVENTION BUREAU BUREAU DE LA CONVENTION DE RAMSAR OFICINA DE LA CONVENCION DE RAMSAR - 1994

CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE
ESPECIALLY AS WATERFOWL HABITAT

CONVENTION RELATIVE AUX ZONES HUMIDES D'IMPORTANCE INTERNATIONALE
PARTICULIEREMENT COMME HABITATS DES OISEAUX D'EAU

CONVENCION RELATIVA A LOS HUMEDALES DE IMPORTANCIA INTERNACIONAL
ESPECIALMENTE COMO HABITAT DE AVES ACUATICAS

P R O C E E D I N G S

OF THE FIFTH MEETING OF THE CONFERENCE
OF THE CONTRACTING PARTIES

P R O C E S - V E R B A U X

DE LA CINQUIEME SESSION
DE LA CONFERENCE DES PARTIES CONTRACTANTES

A C T A S

DE LA QUINTA REUNION
DE LA CONFERENCIA DE LAS PARTES CONTRATANTES

Kushiro, Japan/Japon/Japón
9 - 16 VI 1993

VOLUME/VOLUMEN II

Conference Workshops
Ateliers de la Conférence
Talleres de la Conferencia

RAMSAR CONVENTION BUREAU
BUREAU DE LA CONVENTION DE RAMSAR
OFICINA DE LA CONVENCION DE RAMSAR

Rue Mauverney 28
1196 Gland, Switzerland/Suisse/Suiza

1994

INVENTORY, RESEARCH AND MONITORING WITHIN THE WISE USE CONCEPT

verbal presentation made by T.E. Dahl, National Wetlands Inventory,
U.S. Fish and Wildlife Service, St. Petersburg, USA

There is no simple answer to the question of 'How to achieve the wise use of wetlands'. Technical, social, and economic forces exert influences to varying degrees upon the wide array of agencies, organizations and institutions that have responsibility for implementing the wise use principles within the nations of the world.

Of the tools available to a country striving to attain wise use of wetlands, the Wise Use Working Group has selected several main elements for elaboration and to provide further guidance. For discussion purposes, these elements have been aggregated and are represented by Institutional Arrangements; Site Management; Information Transfer; Training and a broad category termed Technical/Scientific Actions. This paper deals with the components that best fit into the Technical/Scientific Actions, specifically inventory, research and monitoring of wetlands.

At the Meeting of Experts held in Texel, Netherlands (September 1992) a series of case studies were presented as examples of wise use from around the world. At the conclusion of these presentations, it was clear that no single case study could be used as a model for attaining wise use. Rather, these case studies could be presented as examples of actions taken 'towards' the achievement of the wise use principle. Actions as described by the main elements in the Wise Use Guidelines contribute toward wise use. Wise use as a premise is perhaps best achieved when these actions are collective and comprehensive.

Thus the interrelationship that should exist between the main elements cannot be overemphasized. Clearly, wetland inventories, wetland research and monitoring need to be designed and conducted in a fashion not as if they were the end product, but so that they contribute to other elements all working in concert towards the wise use of wetlands.

Each of these actions should have closely related objectives and goals. In general, inventories, research and monitoring activities should provide information for the users both at the institutional or policy level and the management level. They should in some way promote greater awareness of wetland values and/or functions that may be used by policy-makers (institutional) and managers, and contribute to information transfer or public awareness and training exercices. Inventory, research and monitoring activities should also be designed to provide transfer of both the techniques employed and the results obtained.

Inventory

While there are a number of different interpretations of what constitutes a wetland inventory, there should be similar objectives regardless of the methods, extent or intensity of the inventory process itself. These objectives may be summarized by the following generalizations:

- An inventory should provide baseline information on wetland location and numbers.

- An inventory should not be a static tool. To be useful, inventories need periodic updating.

- The inventory should lend itself to applications of other data. Landscape or catchment-wide maps or other land-based data sets are the most obvious examples.

- An inventory should enable the user(s) to draw associations between wetland types, sizes and socio-cultural uses.

- Inventories may be initiated from the local level and build upward, or they may begin at the national level and proceed to incorporate local level information.

When conducting wetland inventories several key issues routinely arise. Some of these may include: Should inventories be standardized such that there is some uniformity across national borders? What are the essential products of an inventory? Should an inventory assign values? How often should an inventory be updated? All of these are important considerations when planning to conduct a wetland inventory.

Research

Research can be defined as anything that expands our knowledge of wetlands. Successful research often spawns more questions and needs than other scientific endeavours. Consequently research priorities are constantly changing. Consistent with the goals for conducting research are the following elements:

- Establishing research priorities must be an evolving process based on the level of knowledge and the priority given to research questions.

- Research must be interactive and integrative with management and other organizations or institutions that are responsible for wetlands.

- Research results must be understandable. This is particularly true in regards to policy-makers and legislators.

- Research activities must consider landscape (catchment) functions and interactions.

The sustainability of wetland utilization is the most urgent priority for research to address. This may be true worldwide as developing countries look to sustain traditional utilization of wetland resources while developed countries seek ways to justify natural resource values associated with wetland systems.

Other considerations regarding wetland research could address the issue of how interchangeable wetland research studies may be given the diversity of cultural needs and differing views on functions, values and potential uses. In other words, is some research regionally dependent?

Monitoring

During the technical workshops of the XXV International Waterfowl and Wetlands Research Bureau (IWRB) meeting in November 1992, monitoring wetland change was addressed in at least two separate workshop sessions. For the ease of discussion, both wetland loss and wetland ecological change topics will be combined and addressed under 'monitoring wetlands'.

There is a common misconception that wetland loss studies or other wetland monitoring activities are dependent upon complete inventories. This is not the case. Just as the Ramsar Bureau is able to monitor listed sites simultaneous to additional wetlands being added to an expanding international list, inventories and monitoring processes can be developed independent of each other. Over the decade, monitoring quantitative and qualitative changes in wetlands will assume additional importance. Both developed and developing countries must be prepared to conduct monitoring studies to help answer difficult questions about wetland extent, values and sustainability.

Some features of wetland monitoring should include:

- Monitoring, unlike inventory, must accommodate some recognition of wetland function.

- Monitoring should recognize landscape (catchment) level factors as contributors to wetland ecological change.

- Monitoring should be conducted as a recurring process over time.

- Ideally, the monitoring process should address qualitative changes and area changes.

Questions relative to monitoring include a controversial topic involving ecological change versus human-induced ecological change. This inevitably leads to a follow-on question: Can there be human use without human-induced ecological change? In a global context an additional question arises: Is a standardized, replicable monitoring network for wetlands desirable? Is it possible? Answers to such questions have very real ramifications for monitoring global change effects on ecosystems, including wetlands.

Summary

In conclusion, there are three key points:

1) Inventory, research and monitoring as technical tools to achieve wise use must not stand alone. To be most effective, they must be linked to each other and to the other main elements enumerated in the Wise Use Guidelines.

2) Linkages within and between professional disciplines; between different ministries dealing with wetland resources; between national, regional and local interest; and internationally between Contracting Parties working toward the wise use concept.

3) Prioritizing actions depends on practical determinations specific to each institution within each country. Staff, funding, technology and politics all play a role in determining actions and products. Regional workshops or meetings of experts may be desirable and it is here where the Ramsar Bureau may be helpful in organizing and/or coordinating efforts.

   There may be no absolutely correct answer or formula to sequentially achieve the wise use of wetlands. We all must strive to do what is possible toward that end.