

**RESEARCH AND MONITORING BREAKOUT SESSION / GRUPO
DE TRABAJO SOBRE INVESTIGACION Y MONITOREO
– THURS 23RD OCT 2008**

SUMMARY

Two broad themes/ Dos temas amplios

1. A lot of people are doing pieces of the research and monitoring at lots of sites across different countries, and there is a strong sense and need of sharing protocols, models, experiences and that part of what we are doing is developing tools (web pages, serve lists, e-bird database) that can serve to connect all these people for common goals and collaboration.

1. Muchas personas estan haciendo partes de la investigacion en muchos sitios de diferentes paises y hay un sentir generalizado de la necesidad de intercambiar y compartir protocolos, modelos, experiencias y que parte de ;lo que estamos haciendo es desarrollando herramientas (paginas web, listas de discusion, e-bird bases de datos) que pueden servir para conectar a la gente para cumplir objetivos comunes y lograr colaboracion.

2. Research and monitoring should not be separate activities from conservation and outreach.

This is a two way process: people who are doing restoration, management, certification etc, need to be connected to the research and monitoring people so that we can work at these sites and evaluate the success of these activities.

At the same time the researchers need to think about how to design our research and monitoring so that it addresses the most important conservation and management questions and so that we are not just counting birds.

2. La investigacion y monitoreo no debe estar desconectado de la conservacion y de la educacion.

Es un proceso de dos vias. Por un lado las personas haciendo restauracion, manejo, certificacion etc, necesitan estar conectadas con los investigadores para que ellos trabajen en los lugares restaurados para evaluar el efecto de estas acciones.

Al mismo tiempo los investigadores necesitan pensar en como disenar sus investigaciones para incluir las preguntas importantes de conservacion y manejo para no solo contar aves.

Main Action Areas / Areas de Accion principales

1. Consolidate winter range and abundance, completing modeling of distribution

1. Consolidar el rango de invierno y las abundancias, completar el modelo de distribucion.

2. Winter habitat quality

2. Cuantificar la calidad de los habitats

- 3. Migration – stopover etc
- 3. Migracion – sitios de parade etc

- 4. Migratory Connectivity
- 4. Conectividad migratoria

- 5. Landscape context within winter range
- 5. Contexto del paisaje dentro del rango no reproductivo

**1. Consolidate winter range and abundance, completing modeling of distribution /
Consolidar el rango de invierno y las abundancias, completar el modelo de
distribucion.**

Specific model objectives / Objetivos especificos

- 1. Initial goal is to identify areas where bird are likely to occur so verification can take place based largely on historical records
- 1. Inicialmente se deben identificar las áreas de presencia probable, con datos de registros históricos, para hacer verificación en campo.

- 2. Second stage is to develop a more powerful predictive model that can be coupled with protected areas, coffee growing regions to guide habitat protection efforts
- 2. La segunda fase es desarrollar un modelo predictivo mas preciso que incluya areas protegidas y áreas de cultivo de café para guiar los esfuerzos de conservación y manejo/protección.

Action Steps / Acciones

- 1. Make sure that we are capturing as much of the data that exists in a common centralized database that includes both historical and current data
- 1. Asegurarnos de capturar la mayor cantidad de datos posible, que existen, en una base de datos centralizada que incluya datos históricos y actuales.
- 2. Modelers must agree on common techniques and work together to create models rather than various entities or individuals producing separate models.
Coordination is important in terms of cost. Coordination between winter habitat modeling and stopover information
- 2. Los “modeladores” deben llegar a un consenso de técnicas y deben trabajar juntos para crear un gran modelo. Evitar crear múltiples modelos independientes y desconectados

- 3. Verification of models – visiting sites that are predicted to hold birds.
- 3. Verificación de modelos – visita de sitios con alta probabilidad de presencia de las aves.

- 4. Start disseminating information on known hotspots to the parties that can convert it into conservation action

4. Empezar a difundir la información sobre los “sitios calientes” a los grupos que empezaran las acciones de conservación allí.

2. Habitat Quality and Specific Habitat Variables / Calidad de habitat y variables específicas de habitat

Actions / Acciones

1. Establish which sites would it be feasible to carry out long term studies and where are studies currently
1. Establecer cuales sitios son factibles para adelantar estudios de largo plazo y donde existen ya este tipo de estudios.
2. Determine specific objectives and accompanying protocols – to be adjusted for the number of individuals that could be captured/observed
2. Determinar objetivos específicos y protocolos acompañantes – que puedan ser ajustados para los numerosos de individuos que se pueden capturar/observer.
3. Create objectives and protocols for long-term sites where we can examine survival and other measures of habitat quality
3. Crear objetivos y protocolos para los estudios de largo plazo en los que se pueda examinar supervivencia y otras medidas de calidad de habitat
4. At all levels protocols MUST be standardized.
4. A todo nivel los protocolos deben estar ESTANDARIZADOS.

Questions / Preguntas

1. Where are sites with large numbers of GWW and CERW
1. Donde estan los sitios con grandes numerosos de GWW & CERW

3. Monitoring protocols for the main goals / Protocolos de monitoreo para los objetivos principales

Actions / Acciones

1. Establish standardized field protocol for GWW that will be used throughout range during 2008/2009.
1. Establecer protocolos de campo estandarizados para GWW que sera usado en todo el rango en 2008 y 2009
2. Turn the initial survey into a baseline for extensive monitoring across the species range.
2. Convertir la evaluacion inicial en una linea base para monitoreo sobre todo el rango de las species.

3. Establish longer term monitoring protocols at specific sites for both warbler species and other species present.
3. Establecer protocolos de monitoreo específicos para los sitios de estudios intensivos para ambas cerúlea y Alidorada y para otras especies presentes.
4. Create monitoring designs at specific sites that will inform conservation planning in terms of variation in coffee growing practices etc.
4. Crear diseños de monitoreo en lugares específicos que informaran a la planeación de conservación en términos de variaciones en las prácticas de cultivo de café etc.
5. A field course/s to ensure standard adoption of field protocols
5. Cursos de entrenamiento para asegurar la adopción e implementación adecuada de los protocolos.

Overall action / Acción general

Integrate past priorities and actions with those resulting from this meeting.

Integrar prioridades pasadas y acciones con aquellas resultantes de esta reunión.

***** NOTES *****

Began with review of objectives from the current workshop and from those in 2007 and 2002.

Biological investigation coupled with socioeconomic investigation

- are we biologists or should we address both issues?
- research in education areas, evaluating effectiveness

Review of Central American Regional Goals

Research & Monitoring - Comments

Need clarification of monitoring program

- suggestion that we should use abundance as measure of use to start with before more detailed research into habitat quality
- should we start with intensive research and monitoring or should that come later with initial efforts focused on identifying range and basic habitat use to guide immediate conservation activities.

Review of South American Regional Goals

Research & Monitoring - Comments

- Separate research needs into migration and overwinter habitat. Ebird, increasing information on GWW could be utilized. Potential crucial areas in Northern South America for Cerulean Warbler. How to assess habitat quality on stopover.
- Ken, focus on stopovers and maintain separate from over-winter research

Comments on major objectives

- Are we too narrow already, should we maintain a greater variety of goals to avoid loss.
- Also many of the objectives are very broad, so breaking them down is important
- Stress that we should make sure that work focuses on primary habitats as well and not so much on agro-environmental systems.
- data availability and sharing, needs to be captured under main goals.
- Migration should be one of the broad categories and also migratory connectivity

Master List

Consolidate winter range and abundance, completing modeling of distribution

Winter habitat quality

Migration – stopover etc

Migratory Connectivity

Landscape context within winter range

Consolidate winter range and abundance, completing modeling of distribution

Future directions

Maria - In Quito a database of records for cerulea was created. There are new data, with more accurate meta data that need to be included.

For chrysoptera historical records have been gathered together, however, there are still problems getting hold of all historical records due to the large range of countries in which GWW occurs. In process of gathering these and including new records with a higher accuracy of location information.

Need to define exactly which data to include to exclude migratory birds.

The modeling is not difficult, the question is to define what is missing in terms of coverage.

Gabriel – 40-50% of verification in field completed. A year or more needed to finish. The process is expensive. Are there are means to complete this verification in economic and practical terms.

Should the process of verification be much simpler, less demanding in terms of resources.

Utilise the experiences in other countries to improve the determination of range in other countries.

Common protocols for assessing range

Lee Brown available for modeling

The modeling process has to be adjusted in terms of complexity for the time it takes to produce it.

Is the model biased towards accessible areas. There is a need to ensure surveying across as broad range of habitats.

E-bird data must go into models.

In Ecuador need to define areas to be surveyed to add to the modeling process.

Generally need to promote the submission of records

E-bird are beginning to produce maps of distribution using visual observations.

What are specific model objectives

1. Initial goal is to identify areas where bird are likely to occur so verification can take place based largely on historical records
2. Second stage is to develop a more powerful predictive model that can be coupled with protected areas, coffee growing regions to guide habitat protection efforts

Action Steps

5. Make sure that we are capturing as much of the data that exists in a common centralized database that includes both historical and current data
6. Modelers must agree on common techniques and work together to create models rather than various entities or individuals producing separate models.
Coordination is important in terms of cost. Coordination between winter habitat modeling and stopover information
7. Verification of models – visiting sites that are predicted to hold birds.
8. Start disseminating information on known hotspots to the parties that can convert it into conservation action

Habitat Quality and Specific Habitat Variables

What do we have so far?

Two main studies exist. Costa Rica GWW and Venezuela CERW

Gabriel also has banding studies which include the collection of feathers

MoSI in Nicaragua has some data but generally not enough to carry out detailed analysis.

Golden-cheeked Warbler group could also provide records.

Studies in Venezuela have had to focus on a small range of habitats due to the ability to capture enough birds which was crucial for generating estimates of survival.

A banding station in Venezuela has 20 years of data which as yet has not been published.

Ideas & Areas to Explore

Habitat breadth needs to be expanded. Potentially pick habitats at either end of the spectrum to examine what the gradient is like.

Other gradients to look at are land use, precipitation and altitude.

Are there areas in which we could focus studies with a range of habitats and the stability to run long-term projects.

- Jocotoco reserves, year round monitoring
- Peru, a variety of reserves could be used.
- Cenicafe, suggest the Santander region for study, wide range of habitats
- Colombia, there will be training of all park guards in 2009, could include monitoring of warbler
- Nicaragua, Jaguar reserve
- These sites need to have near equal sex ratios

What are the protocols to be used in these sites?

Assessing density

Condition

Survival

Departure schedules

Getting material out of any of the countries for isotope analysis can be very powerful

- in Colombia it is becoming easier to get permission for collection of material
- Create database of people who can collect material

Catching Ceruleans is about net placement, where are flocks moving, playback does not seem to be successful.

Provision of colour bands and protocols for use

What methods can be incorporated into existing studies such as MoSI.

Actions

5. Establish which sites would it be feasible to carry out long term studies and where are studies currently
6. Determine specific objectives and accompanying protocols – to be adjusted for the number of individuals that could be captured/observed
7. Create objectives and protocols for long-term sites where we can examine survival and other measures of habitat quality
8. At all levels protocols MUST be standardized.

Questions

Sites with large numbers of GWW and CERW

Long Term Monitoring

What type of information can we generate that can be fed into the conservation and management process in terms of monitoring

Two types of monitoring required.

1. To identify site use
2. Longer term monitoring covering a range of sites

Protocols

GWW – planned surveys aimed at determining altitudinal ranges and habitat use.

Variables include basic habitat variables.

Ensure well trained individuals are carrying out surveys

Potential to use block survey design rather than random to minimize cost. 5 km squares?

Visual census could be greatly augmented if we can catch some birds as well.

Should also monitor the habitat changes around us

It is necessary to monitor the impact of changes in growing practices on populations

Actions

6. Establish standardized field protocol for GWW that will be used throughout range during 2008/2009.
7. Establish longer term monitoring protocols at specific sites for both warbler species and other species present.
8. Create monitoring designs at specific sites that will inform conservation planning in terms of variation in coffee growing practices etc.

A field course to ensure standard adoption of field prot