Integrating Adaptation into Conservation Planning: An example from western Tanzania

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Conservation Projects and Protected Areas of Western Tanzania

Ecosystems of the Greater Gombe Ecosystem and Greater Mahale Ecosystem
Future Climate Projections

• Temperatures will continue to rise, across all seasons
• Annual rainfall may not vary, but changes in frequency, intensity & predictability
• Wet seasons will become wetter; dry seasons will become drier
• Despite increased rainfall, it will become more arid
Not everything is going to get worse

Evergreen Forest

Miombo woodland

Bamboo forest
Use both sides of your brain
**Articulate specific predictions**

<table>
<thead>
<tr>
<th>System</th>
<th>Climate factor</th>
<th>Hypothesis of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miombo woodland</td>
<td>Increased temperature (1-2°C by 2050; Change in the frequency, timing &amp; intensity of rainfall)</td>
<td>Increased temperature and more variable and intense rainfall will affect soil moisture and hydrological cycles, changing woodland structure and composition and leading to a rise in fire frequency/incidence, leading to the shrinking of miombo woodland.</td>
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<tr>
<td>Lake Tanganyika</td>
<td>Water temperature increase Changes in the seasonality and intensity of rainfall</td>
<td>With higher water temperature and reduced seasonal rainfall, Lake Tanganyika will become more shallow and more stratified, resulting in less upwelling which will impair fish production.</td>
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</tbody>
</table>
Be critical and think broadly
Existing threats & conditions made worse by climate change...

Tug Hill

...re-energized strategies for resilient forests and wetlands

Restore structure & diversity to forest

Partner with forest companies & landowners to improve practices across whole region
Long Island
Long Island
Lessons Learned

Despite uncertainty, we have enough information to develop scientifically credible hypotheses about potential climate impacts...

...and to start working on adaptation...
Lessons Learned

People are empowered by demystifying climate change

Before...  After!
Lessons Learned

Many good climate adaptation strategies are modifications of what teams are already doing...

...implementation often does not require a major overhaul of activities on the ground
Lessons Learned

It is important to think about how people are going to respond to climate impacts.
Lessons Learned

Connectivity is key


Lessons Learned

“Peer review was GREAT.”

“The peer review process has been fantastic. We should do this for every strategy, climate change related or not.”

Peer review strengthens the process and products

“The interaction with all the peers and partners really helped to lead to clear headed thinking on issues.”
Lessons Learned

Similarities of impacts and barriers around the world make for a rich set of adaptation work that we can learn from.
There are many challenges to implementation, but also many solutions

**Challenges**

- People do not understand the impacts
- Common to focus on short-term rather than long-term needs
- Time and resources

**Potential Solutions**

- Use local examples to educate others
- Make long-term benefits clear and make them affordable in the short-term
- Collaborate with partners, including non-traditional ones – you don’t have to do everything yourself!
**Recommendations**

- Develop a conceptual model

- Think through how people will respond to climate impacts

- Include colleagues who have developed adaptation strategies in other geographies
Recommendations

• Choose the process that works for your team

• Include partners & outside perspectives early & often

• Don’t sweat the small stuff

• Build off of what others have done
And last but not least.....

Remember that we are developing hypotheses –

It’s critical to monitor, evaluate and adjust over time
Useful Links

www.climatewizard.org


http://conpro.tnc.org/1735/

www.conserveonline.org
Questions and Suggestions?