We've already talked about

- Visibility at other meetings
- Interaction with other data infrastructure organizations (DataOne; CUASHI, GBIF, …)
- Scaling up technology to other partners (e.g., add more lakes to lake expedition): data transfer, technology transfer, and expertise transfer (learning how to use new tools).

Issues

- Communication across disciplines
  - to learn and speak other languages
- What is the interface between scientists and computer scientists?
  - Agile development process: understanding the "why" we do things, need to document what, who, and why (part of agile software engineering process)
- How often does expedition meet?
  - Lake group: Meets about every 3 weeks
  - Biodiversity: Life mapper took on specific task – became Nadya and Aimee Stewart

More Issues in too much detail

- What is role of students in Expeditions, how do we engage them?
  - Beth: too much homogeneity in students – all hardcore CS
  - Meilan: very focused, late in phd track, must always get permission to engage
  - Need pairing early phd students with complementary professionals
  - Craig doing VNO
- Need to identify Potential opportunities
  - Meilan: students could meet frequently to narrow this down;
  - everyone has own technology, and subjects/interests – what needs to be done, how could my expertise help?
- Students could get together and exchange expertise,
- domain person could explain expedition and needs,
- maybe students would identify how they could help,
- CS profs would interpret to identify interesting CS problems
- Consider this and plan to do it in October (pragma 27) AND discussions once/ month until then.
- Paul/Craig – needs help with optimization of programs
- Beth: pay a student to incentivize

Action Items

- Something rich for the students:
  - Expedition leads with Beth teleconference
- Hackathon session.
- Expedition work with students.
- Application test-bed and Aimee's lessons learned
- Sensor network WG engagement.
- PRAGMA student and GLEON students collaboration.

Action Items

- Each expedition
  - Create a Wiki presence
  - puts together a poster
  - 10-20 possible connect points for those outside the discipline
- Focused problem
  - "hackathon" for solutions – after some dissemination of shared vision – (inc. user stories, use cases, architecture design)
    - is there a focused topic that would work for both/all expeditions
  - "Hey Telescience Group, help me set up a sensor data gathering for Mt. Kinabalu"
- set up GitHub repository
- Document PRAGMA Day
- NESCent Data Carpentry Workshop with DataONE