

10-14 (1)

## PROGRESS REPORT

### Long-term Vegetation Change at Wupatki National Monument

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#### Objectives Accomplished

- 1) Reviewed the literature and gathered all existing data and documentation on vegetation and long-term vegetation monitoring work in Wupatki National Monument and the surrounding area.
- 2) Analyzed and summarized all past monitoring work including protocols and results. Gathered and digitized all detailed descriptions, locations, and photo documentation of all established permanent vegetation plots.
- 3) Paid for visit by Steve Cinnamon, former Wupatki Resource Manager who worked on this project in the 1980's, to help with transect location and protocol use.
- 4) Located L.T. Green III, who designed and executed the original plots. Will invite him in for a field day.
- 5) Hired technicians at NAU to scan photos. They also entered original data into Excel spreadsheets.
- 6) Checked all project photos are scanned and embedded information is complete and correct. As of 2/2011 we have scanned three trays of slides and 6 boxes of slides. Checked that all photos were scanned and labeled correctly.
- 7) Assessed past monitoring protocols and recommend changes and/or additions, if needed, to establish a scientifically rigorous long-term vegetation dynamics monitoring program.
- 8) Checked archives for historic photos.
- 9) Located all vegetation exclosures. Took photos and digitized locations.
- 10) Located a majority of Community Map Transects in the field. Digitized locations and photographed areas.
- 11) Located almost all of Range Condition Transects that were paired and located in the monument and on adjacent Forest Service land.

We feel objectives 1 and 2 were fully completed in year 1 as proposed. We are now prepared to finalize data collection methods and sample plots in June and July of 2011 to correspond to the times when the original data was collected by L.T. Green, III.

There is \$3,247.28 left in the NAU budget as we were able to utilize a student intern to the Colorado Plateau CESU to do much of the photo and data digitizing (see attached). This will allow us to employ a student for more hours in year 2 to assist with data collection, entry, and analysis.