**NPS**

**PROJECT SUMMARY**

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| **Cooperative Ecosystem Studies Unit****Cooperative Agreement Modification**  |
| FUNDING AGENCY: **National Park Service**  |
|  MODIFICATION NO.: **[CESU info only]**  | COOPERATIVE AGREEMENT NO.:**1200-99-009** |  FUNDING AMOUNT: $25,100.00 |
|  INVESTIGATORS Contact Information: Principal Investigator: Rod Parnell Ph.D. Director, Cooperative Ecosystems Study Unit Northern Arizona University Flagstaff, Arizona 86011 (520) 523-7138 Co-investigator: Trevor Persons Wildlife BiologistUSGS Biological Resources DivisionColorado Plateau Field Station Box 5614, Northern Arizona University Flagstaff, Arizona 86011 (520) 556-7466 ext. 239 Trevor.Persons@nau.edu  |
|  PROJECT TITLE: Assessment of a Declining Grassland Whiptail Lizard (*Cnemidophorus inornatus*) at Wupatki National Monument, Arizona  |
| EFFECTIVE DATES**: May 2001 - June 2004**  |
|  PROJECT ABSTRACT: Natural resource managers and ecologists are concerned about juniper woodland encroachment into former grassland habitat at Wupatki NM, and the impacts of habitat loss upon the grassland fauna. A scientific study of the little striped whiptail lizard within Wupatki NM would yield important information on a conspicuous grassland-dependent species. The results will be utilized by the NPS to: (1) accurately assess the distribution, status, and long-term trends of a potentially declining grassland-dependent species; (2) determine if management actions are needed to reverse potential population declines resulting from grassland habitat loss; and, (3) monitor the ecological effects of the proposed management-ignited fire program. In addition, this study will provide a cost-effective long-term monitoring program for the little striped whiptail. The little striped whiptail lizard study at Wupatki NM is proposed to address the following objectives: (1)   Determine current distribution and relative abundance of both the little striped whiptail and plateau striped whiptail at Wupatki NM. (2)   Describe important habitat features for both the little striped whiptail and plateau striped whiptail. (3)   Assess the long-term population trend within the little striped whiptail lizard population at Wupatki NM by resurveying areas studied at Wupatki during the 1960s. (4)   Assess the threats to the little striped whiptail from regional grassland habitat degradation and woodland encroachment. (5)   Assess grazing effects by comparing relative abundance of the two species within Wupatki (ungrazed) to the adjacent CO Bar ranch (grazed). (6)   Design a simple, cost-effective protocol for long-term monitoring of the little striped whiptail at selected grassland sites. (7)   Provide management recommendations to the NPS for conserving the little striped whiptail and its habitat at Wupatki.    |
| **Agency Representative:**Ron Hiebert, NPSResearch CoordinatorCPCESUNorthern Arizona UniversityP.O. Box 5765Flagstaff, AZ 86011-5765Tel: (928) 523-0877Fax: (928) 520-8223Ron.Hiebert@nau.edu  | **Agency Administration Representative**Mary EstepBudget AssistantIntermountain Support OfficeDenver, CO 80225-0287Tel: (303) 969-2750Mary\_Estep@nps.gov | **Investigator:**Rod Parnell Ph.D.Director, Cooperative Ecosystems Study UnitNorthern Arizona University Flagstaff, Arizona 86011 (520) 523-7138    | **Partner Admin. Contact: NAU Contact-[please insert your local institution contact]:**  |
| ***List of Key Words: [Insert key words]******Wupatki National Monument, lizard, grassland***  |
| ***Agency Manager/Technical Representative from National Park - Include contact information @ Specific Park****:*NPS Technical Representative: Paul Whitefield Natural Resource Specialist Flagstaff Area National Monuments6400 N. Highway 89Flagstaff, Arizona 86004 (928) 526-1157 ext.235 Paul\_Whitefield@nps.gov  |
| *Annual Report Received:**Final Report Received:**Publications on File:*  |
| *This Modification is subject to all the provisions included in the Cooperative Agreement,****dated 6/22/99.***  |
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*Attach any supporting material as necessary.*