



SOCIETY OF

TYMPANUCHUS

CUPIDO

PINNATUS

LTD.

Final Report: Evaluation of the Effects of Red Imported Fire Ants (*Solenopsis invictus*) on abundance of insect prey and brood survival in Attwater's prairie-chickens (*Tympanuchus cupido pinnatus attwateri*) at Refugio and Goliad Prairies for the time period of 4/1/2012 – 9/30/2012.

Submitted by Kirk Feuerbacher, TNC Texas Chapter, Coastal Prairies Project Director, 3303 US HWY 59 N, Victoria, Texas 77905.

The condition of the prairie after the prolonged drought of 2010 and 2011 was fairly good. The private landowners we work with on the project site had significantly reduced stocking rates and rotated livestock to maintain as much residual cover as possible. Fall 2011 rains and timely rains in the spring 2012 were enough to provide forage for adults from the 2011 release. Summer of 2012 had some extended periods of drying and rains came in late August and early September. Seventeen known adults survived into the reproductive season of 2012. TNC APC technician Jay Kelso followed these birds closely every day during spring and summer. Nests were located in early April and predator deterrent pens were constructed around all 5 nests. All five hens hatched and 4 of these had chicks past 2 weeks. Jay Kelso also monitored broods and collected insect abundance data and vegetative structure data every day for 2 weeks post hatch of each nest. Collected insects have been moved to USFWS APC National Wildlife Refuge for analysis. Four hens were flushed at 6 weeks post hatch to determine survival of broods to that point. Two of the hens had at least one chick with them. At approximately 7-8 weeks of age, 3 wild raised chicks, 2 in one brood and 1 in the second, were captured and radio-tagged with low weight radios acquired from Dr. John Toepfer. At the same time, 9 radio marked captive reared chicks of approximate age were brought from captive propagation facilities, by the APCNWR personnel, and released at night in close proximity to the 2 existing wild raised broods and their respective hens so that each hen would have 6 chicks total. According to constant monitoring the captive reared chicks were in the vicinity of the wild chicks and their hen for at least a week and then moved some distance away. Five of the released chicks are confirmed dead. Four of the released chicks could not be found after the fourth week after release. As of the first of November, one wild raised chick is unaccounted for and 9 birds total known to be alive on the RGP. The red imported fire ant research technicians from Texas A&M University sampled 3 times in May on the 2 study sites in Goliad County and the one site in Refugio County. TNC personnel coordinated with landowners to determine best times and maintain access for this research. TNC has provided landowners with information of work and project progress on a

weekly basis. TNC has kept in constant communication with USFWS and Recovery Team personnel as to the progress of monitoring. TNC has provided input to the Recovery Team for a national press release and also an upcoming article in the USFWS Endangered Species Magazine. It is unknown at this time when additional captive reared birds will be released on RGP. We thank you for the support to work on such a unique and disappearing landscape and species.



Above: Jay Kelso of the TX Chapter of the TNC watches as two Attwater's prairie-chicken chicks flush on the Goliad prairie. Photo credit: Kirk Feuerbacher

Note: This report covers work performed under a sub-agreement between STCP, Ltd. and TNC Texas as part of a National Fish & Wildlife Foundation grant.