Military Training Effects on Gopher Tortoise Populations. (A02-balbach125454-Oral)

Authors:

- H.E.Balbach* - *US Army ERDC-CERL, Champaign, IL*
- R.D.Birkhead - *Auburn University*
- C.Guyer - *Auburn University*

Abstract:

We examined the influence of tracked vehicle use on gopher tortoises (Gopherus polyphemus) on Ft Benning. Did tortoises on sites with heavy tracked vehicle use differ from those in areas with limited tracked vehicle use in: number of burrows used during the active season; rates at which female tortoises receive visitors; and in the number of males that visit each female? Data from an undisturbed, off post, site with characteristics of old-growth longleaf pine forest were used for comparison. We found similar numbers of burrows were used by both sexes in both the heavily-disturbed and less-disturbed sites on Ft. Benning, but more burrows per animal were used at the undisturbed comparison site. Significantly fewer total social visits were received by females in the more highly disturbed sites. In both the less-disturbed areas and the off-post site, many more different males visited each female. One conclusion drawn is that females on sites impacted by tracked vehicle activities seem to have more limited options for mate choice and, therefore, are susceptible to problems associated with inbreeding and restricted gene flow.

Corresponding Author Information:

Harold Balbach
US Army ERDC-CERL
PO Box 9005
Champaign, IL 61826-9005

phone: 217-373-6785
fax: 217-373-7266
e-mail: h-balbach@cecer.army.mil

Presentation Information:

Presentation Date: Tuesday, November 12, 2002
Presentation Time: 9:00 am

Keywords:

Military Training, Gopher Tortoise, Ft. Benning, GA, Training Effects