

Capture and Handling of Free-living Wild Small Mammals for Research and Education



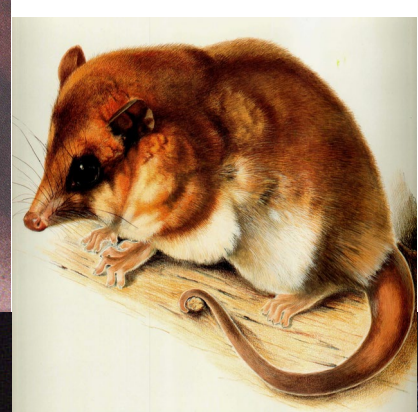
Jim Kenagy
University of Washington

Professor of Biology, Emeritus
Department of Biology

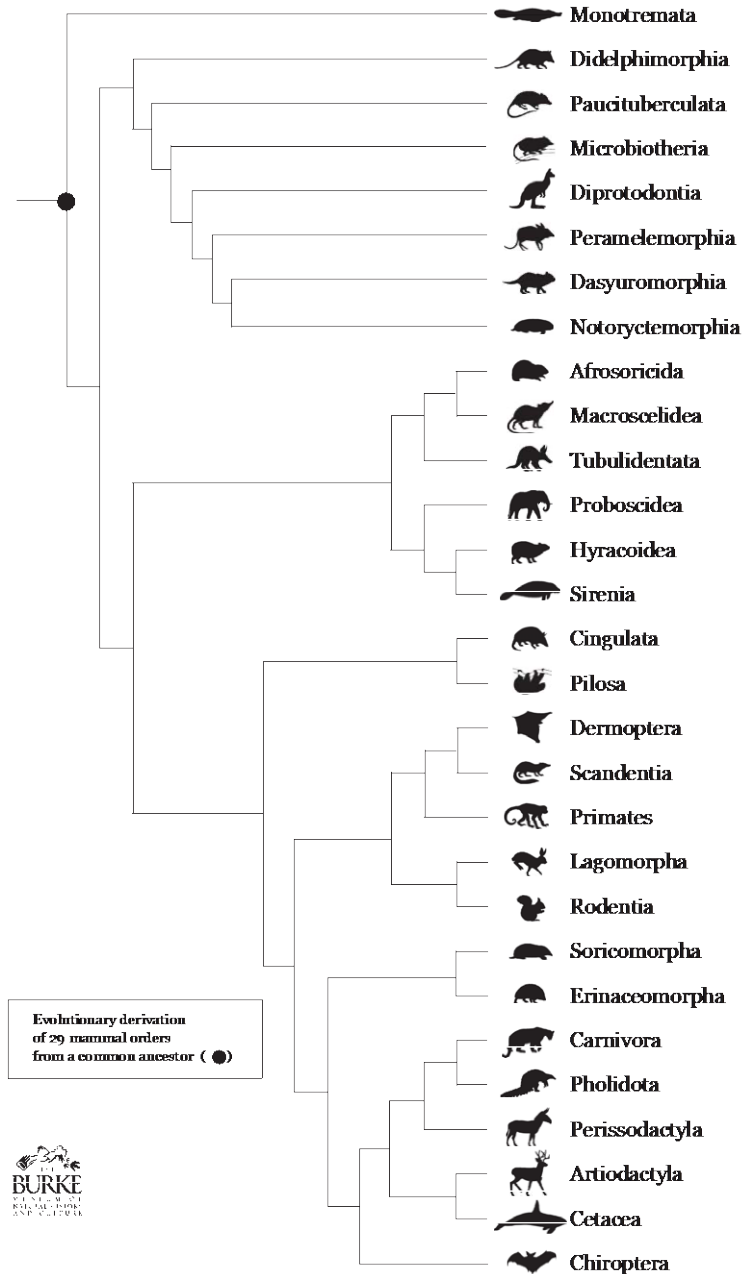
Curator of Mammals, Emeritus
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Capture and Handling of Free-living Wild Small Mammals for Research and Education



Tree of 29 Mammal Orders “MAMMALIAN PHYLOGENY”

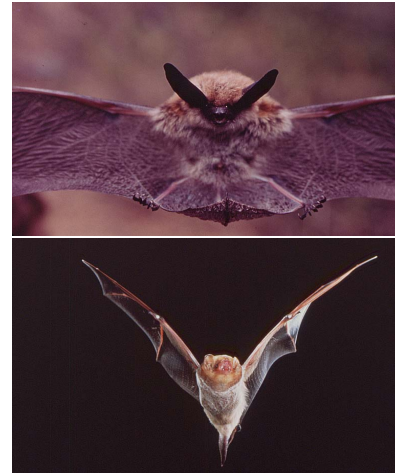


Lots of variety...



~29 Orders, ~160 families, ~6000 species

Chiroptera 21 families, ~1400 species



Rodentia 34 families, ~2400 species



Capturing and Handling



Capturing and Examining



Capturing and Examining



Minor Procedures



Research Specimens for Museums



Variety of Data and Observations

Long-term monitoring of individuals and populations



Variety of Data and Observations

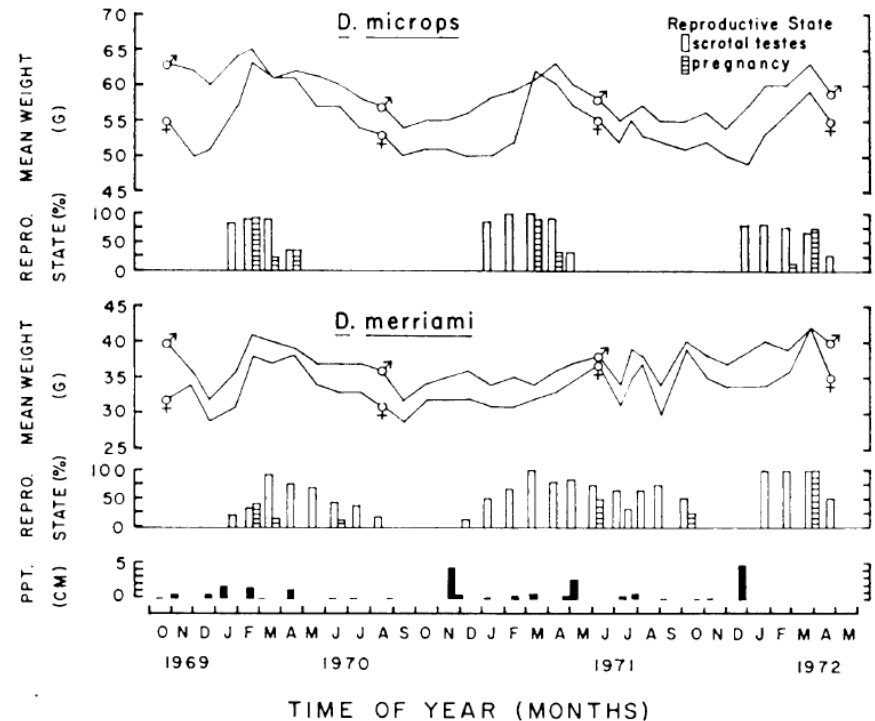
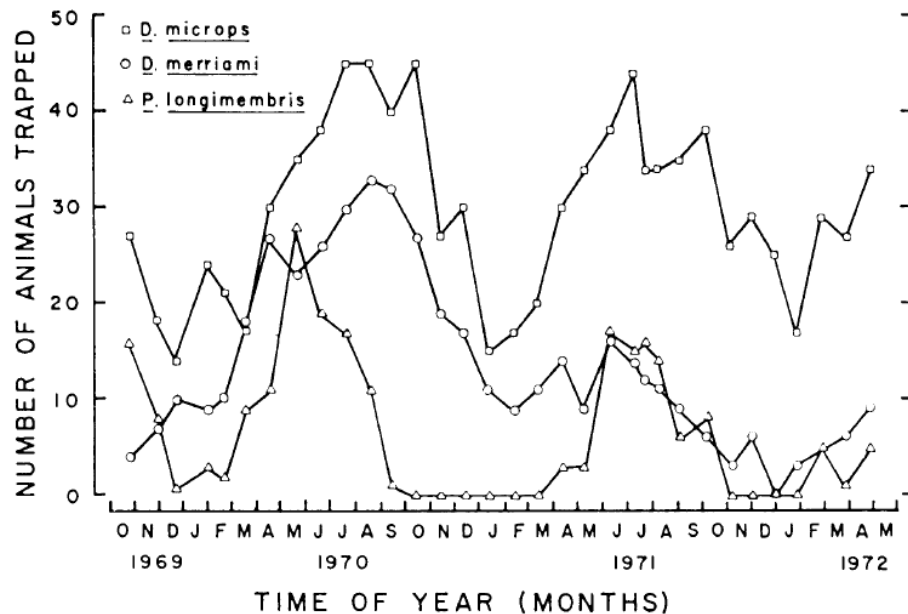
Long-term monitoring of individuals and populations

DAILY AND SEASONAL PATTERNS OF ACTIVITY AND ENERGETICS IN A HETEROMYID RODENT COMMUNITY¹

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Department of Biology, University of California, Los Angeles, California 90024

Ecology 54: 1201-1219. (1973)



SEASONAL REPRODUCTIVE PATTERNS IN FIVE COEXISTING CALIFORNIA DESERT RODENT SPECIES¹

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AND

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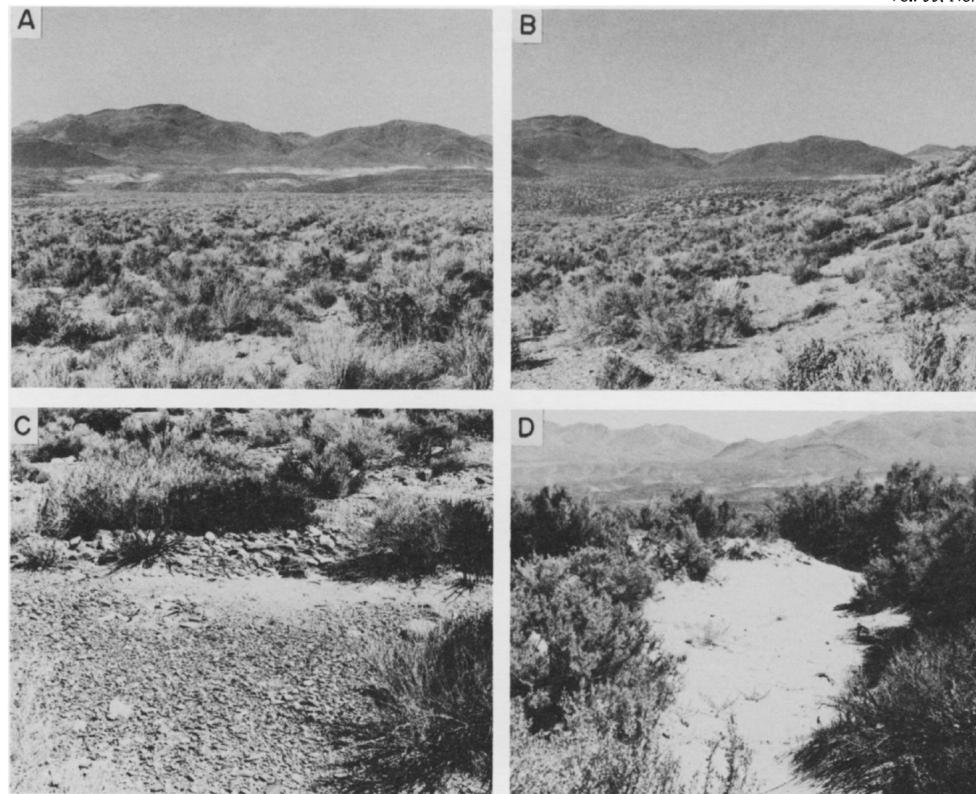


FIG. 1. Topography and vegetation of east side of Owens Valley near Big Pine, California. Predominant shrub species is shadscale, *Atriplex confertifolia*. (A) Flat surface of valley floor, with Inyo Mountains in background. Mostly sandy substrate with small hillocks at base of many shrubs. (B) Low hillsides associated with small ravines or washes draining into the valley floor. (C) Stony alluvium with mixed sandy deposits associated with flow of water and wind. (D) Larger accumulation of windblown sand stabilized by shrubs.

SEASONAL REPRODUCTIVE PATTERNS IN FIVE COEXISTING CALIFORNIA DESERT RODENT SPECIES¹

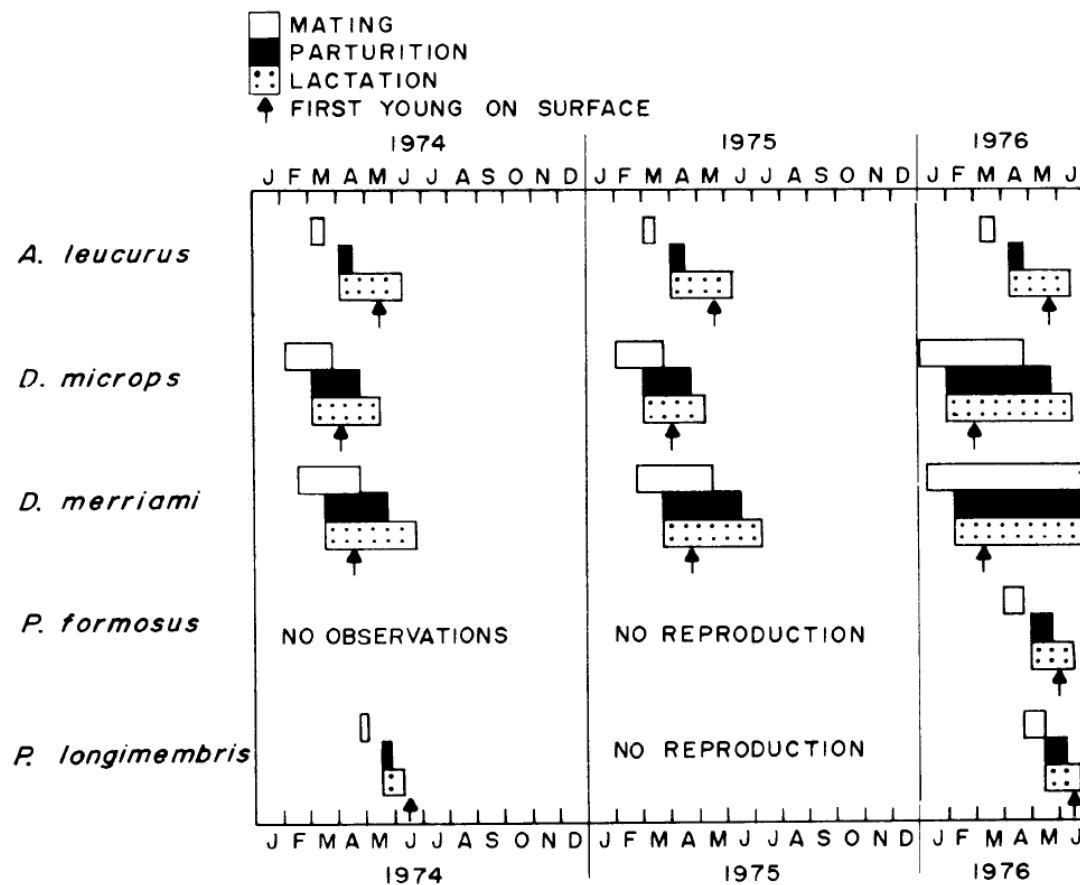
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Annual cycle of energy and time expenditure in a golden-mantled ground squirrel population

G.J. Kenagy, S.M. Sharbaugh, and K.A. Nagy*

Department of Zoology, University of Washington, Seattle, WA 98195,

Oecologia 78: 269-282. (1989)



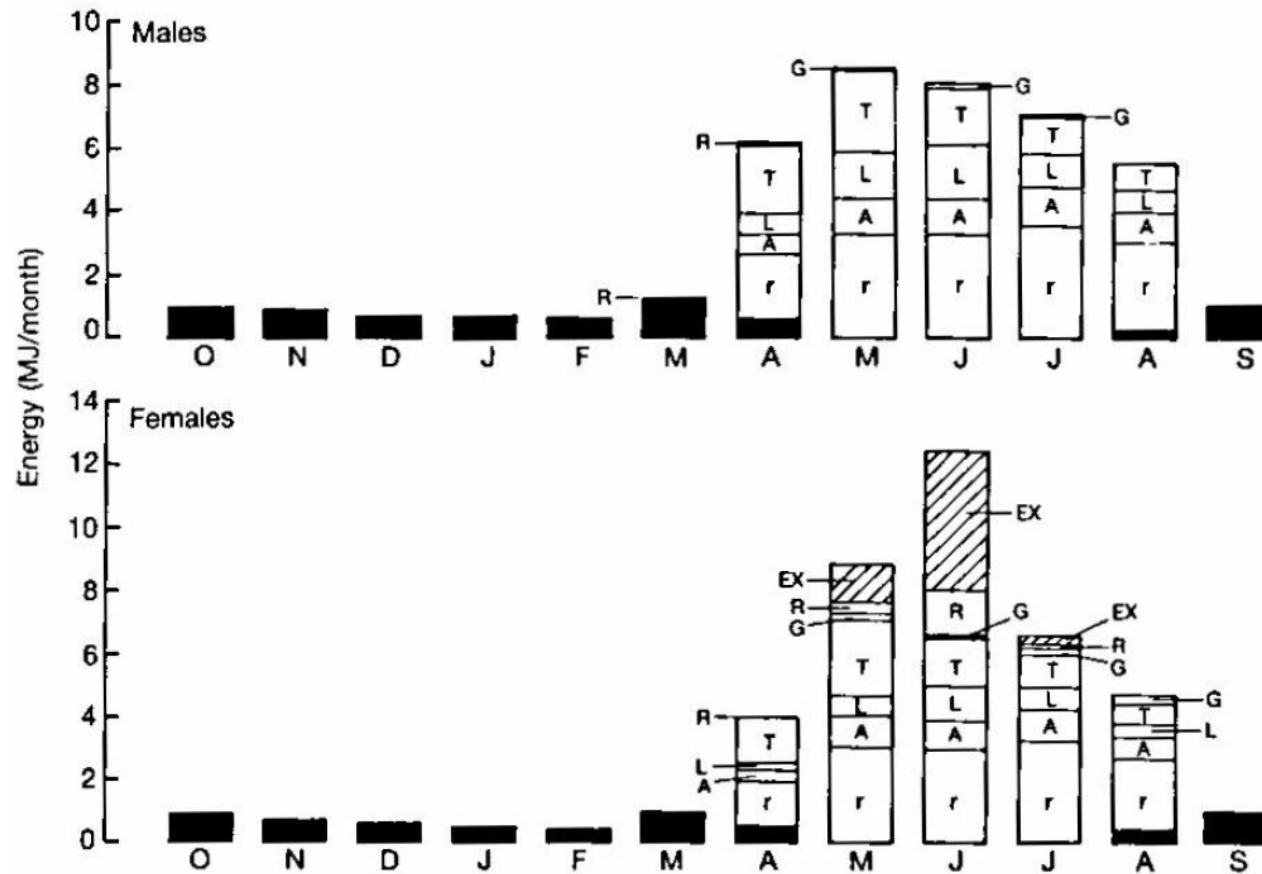
Journal of Animal Ecology (1990), **59**, 73–88

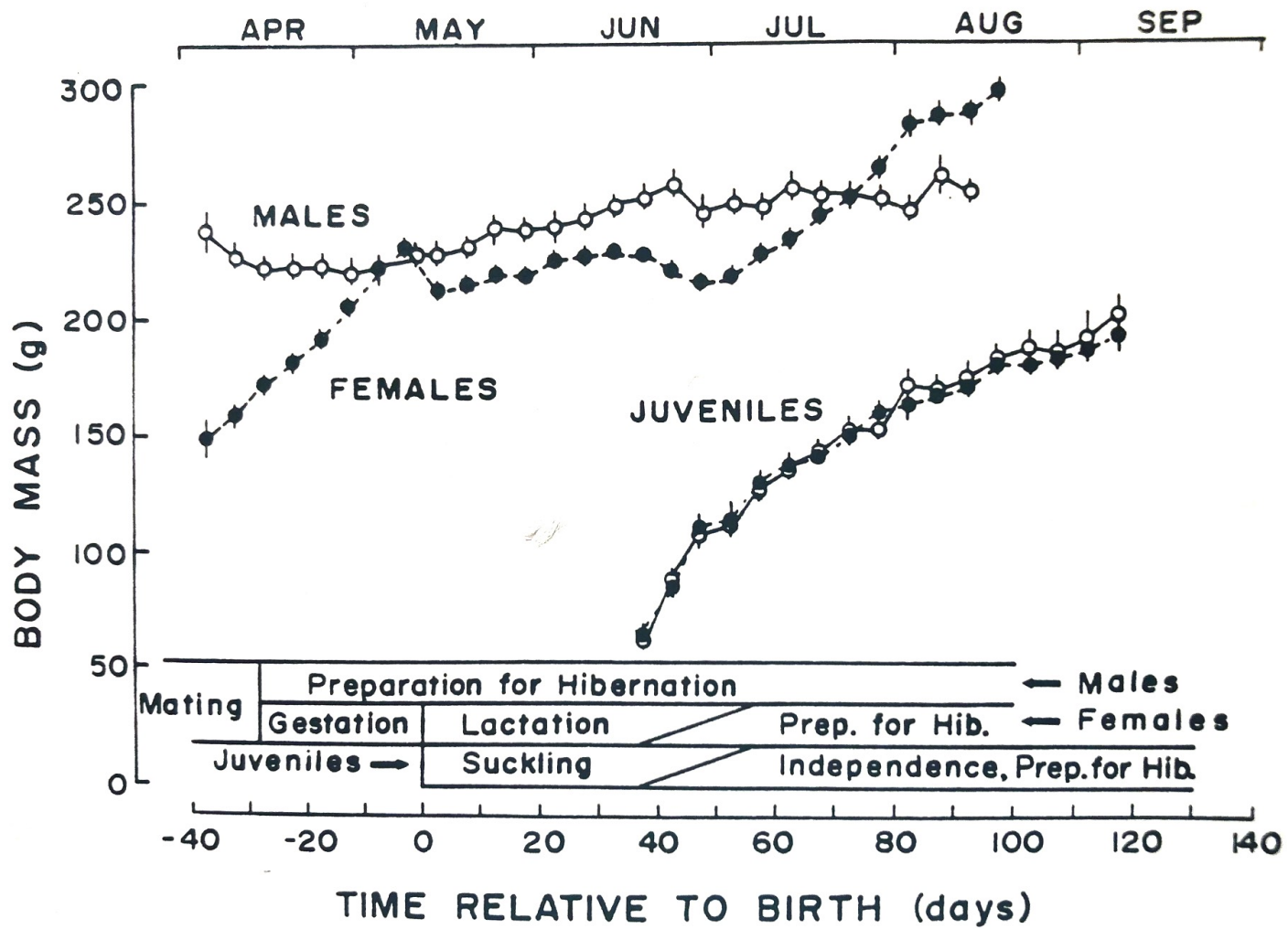
ENERGY EXPENDITURE DURING LACTATION IN RELATION TO LITTER SIZE IN FREE-LIVING GOLDEN-MANTLED GROUND SQUIRRELS

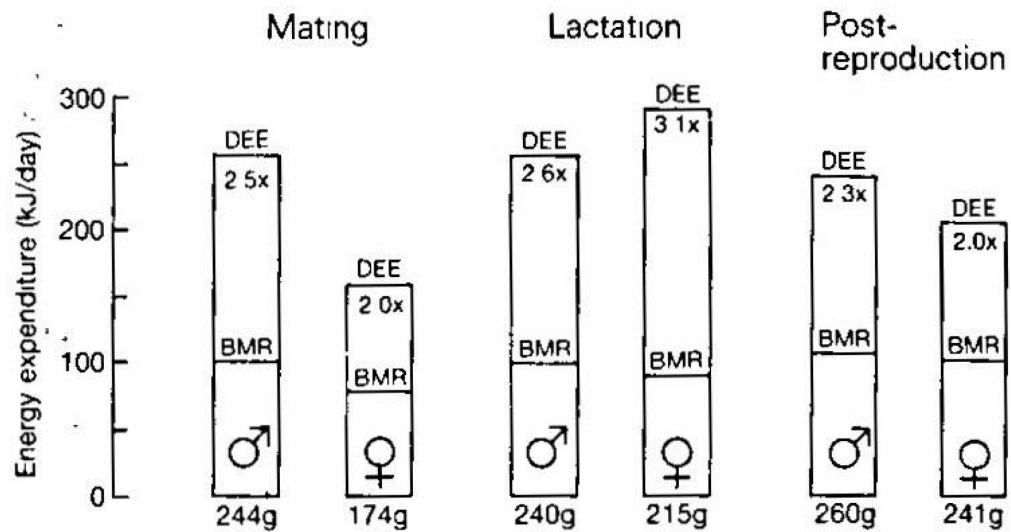
BY G. J. KENAGY, D. MASMAN*, S. M. SHARBAUGH AND K. A. NAGY†

Department of Zoology, University of Washington, Seattle, Washington 98195, U.S.A.

Energy allocation for reproduction in the golden-mantled ground squirrel

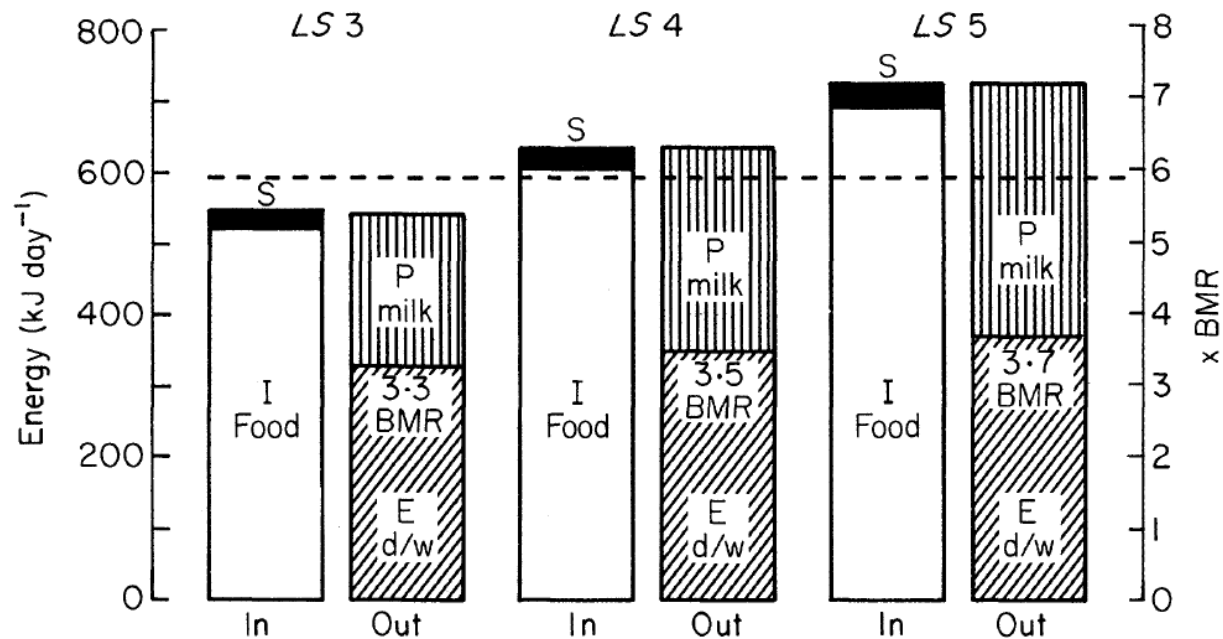






Female ENERGY BUDGET in relation to Litter Size

Daily energy balance at peak lactation

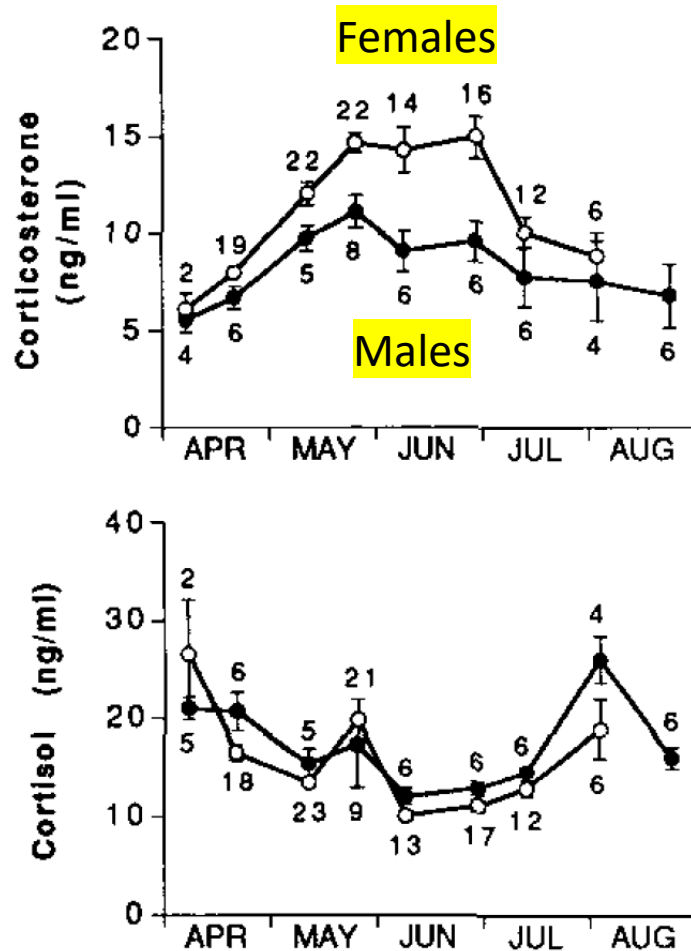


Seasonal Changes in Body Mass, Insulin, and Glucocorticoids of Free-Living Golden-Mantled Ground Squirrels

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*Departments of *Zoology and †Psychology, University of Washington, Seattle, Washington 98195*

General and Comparative Endocrinology 96: 339-346. (1994)



Seasonal Changes in Plasma Glucocorticosteroids of Free-Living Female Yellow-Pine Chipmunks: Effects of Reproduction and Capture and Handling

General and Comparative Endocrinology 117: 189-199. (2000)

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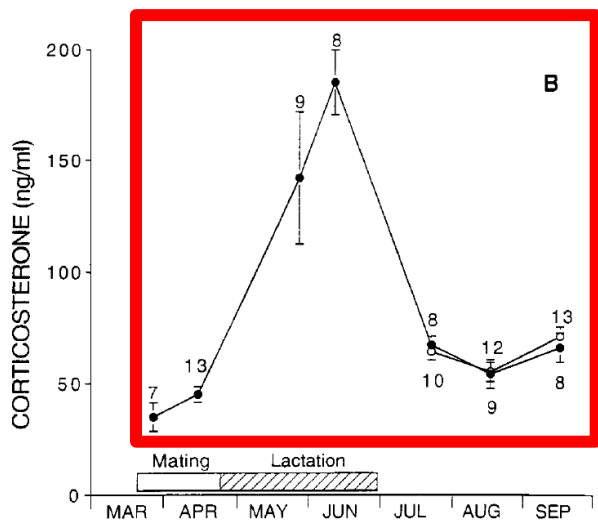
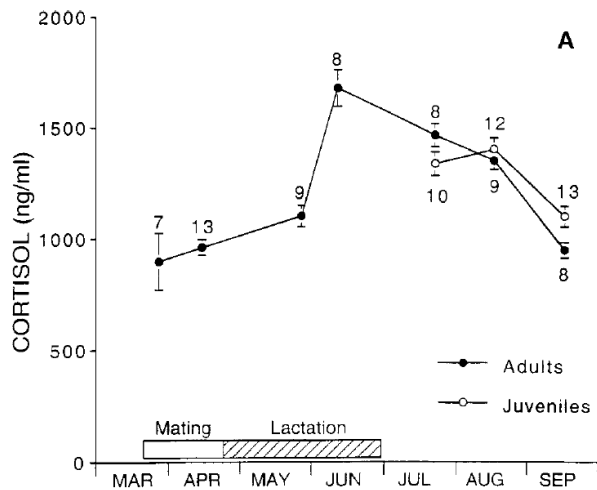
N. J. Place · G. J. Kenagy

Seasonal changes in plasma testosterone and glucocorticosteroids in free-living male yellow-pine chipmunks and the response to capture and handling

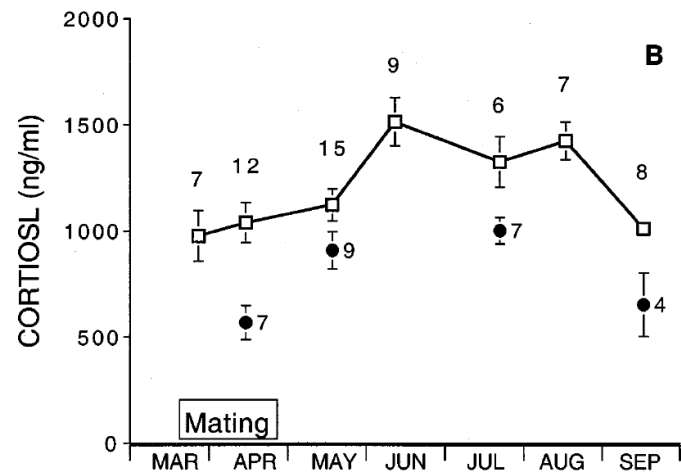
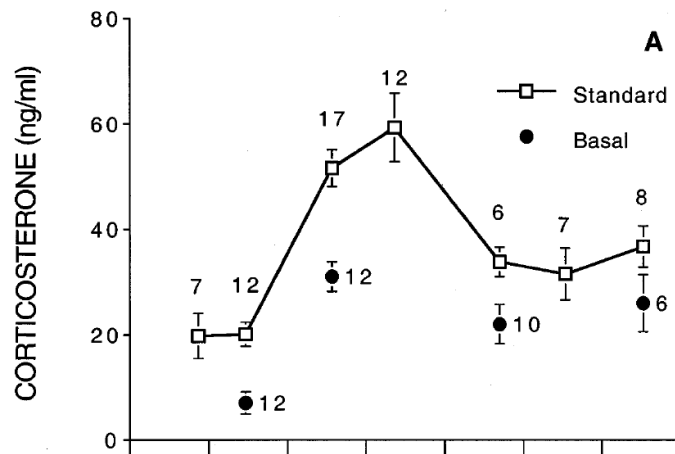
Journal of Comparative Physiology B 170:245-251. (2000)



Chipmunk Females

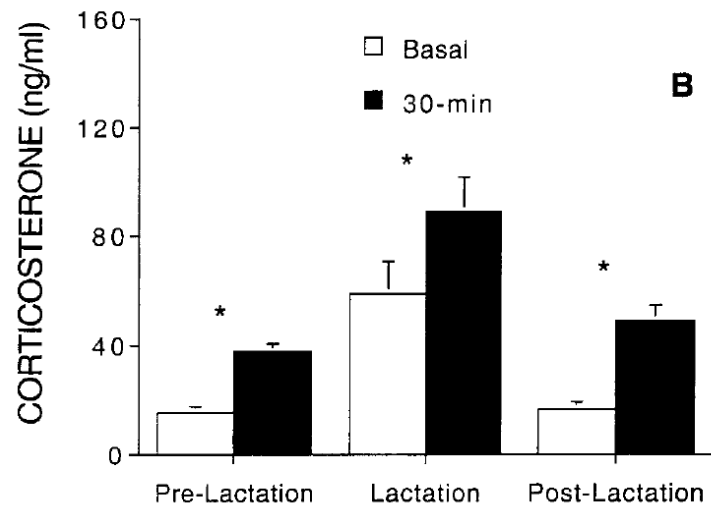
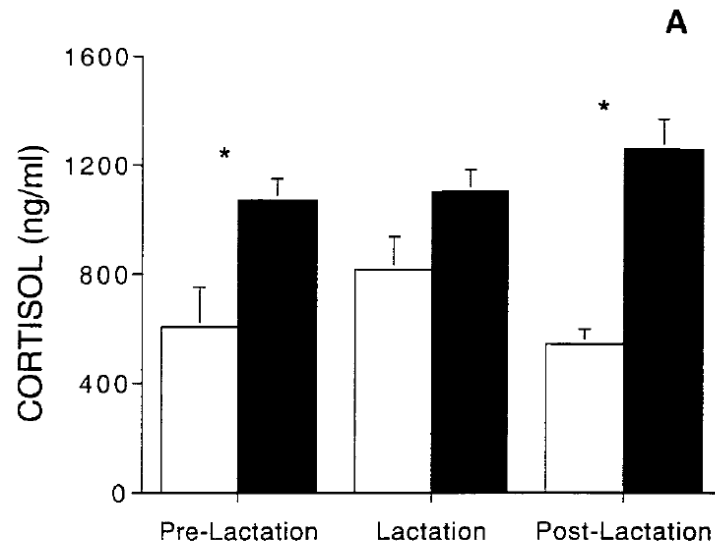


Chipmunk Males

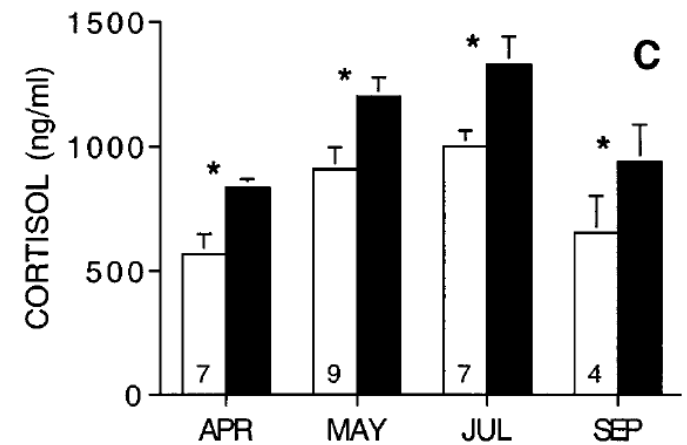
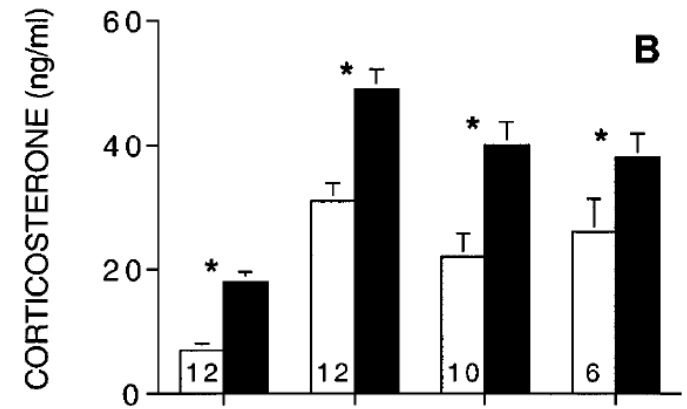




Chipmunk Females



Chipmunk Males



Variety of Data and Observations

Variation of Genetic Structure



Genetic structure of desert ground squirrels over a 20-degree-latitude transect from Oregon through the Baja California peninsula

JOSHUA R. WHORLEY,*S. TICUL ALVAREZ-CASTAÑEDA‡ and G. J. KENAGY*

*Burke Museum and Department of Biology, University of Washington, Seattle, USA; ‡Centro de Investigaciones Biológicas del Noroeste, La Paz, BCS, México

Molecular Ecology 13:2709-2720. (2004)



Historical biogeography and post-glacial recolonization of South American temperate rain forest by the relictual marsupial *Dromiciops gliroides*

Christopher M. T. Himes^{1*}, Milton H. Gallardo² and G. J. Kenagy¹

Journal of Biogeography 35:1415-1424. (2008)



DIVERSIFICATION AND GENE FLOW IN NASCENT LINEAGES OF ISLAND AND MAINLAND NORTH AMERICAN TREE SQUIRRELS (*TAMIASCIURUS*)

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⁴Department of Biology and Marine Biology, University of North Carolina Wilmington, Wilmington, North Carolina 28403



Evolution 68:1094-1109. (2014)

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