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ending on different days. Twenty-four animals were...
with 1.0 mg, on the day of trauma and daily...
until killed on Days 7, 8, 9, 10, 11, or 12.
er animals were injected with 1.0 mg, starting on...
fourth day after trauma and daily thereafter until...
Days 9, 10, 11. Twelve animals were injected...
5 mg, on the day of trauma and daily thereafter...
killed on Days 7, 8, or 9. Twelve animals were in-...
with 0.5 mg, on the fourth day after trauma and...
thereafter until killed on Days 9, 10, or 11. Sub-...
histological examination of the uteri indicated...
the life span of the deciduomata (cf. Turnbull...
in this issue) was not prolonged by progester-...
herein administered.

Effect of Food Supply on the Egg-laying Date of Junco (*Junco hyemalis*)

JAMES T. TANNER, University of Tennessee

...nest in the Great Smoky Mountains at progres-...
later dates with increasing elevation. This could...
result of temperature affecting the birds, or of...
perature affecting their food supply and the availa-...
of food determining the time of nesting. At this...
Juncos feed almost entirely on ground-inhabit-...
arthropods. The abundance of this kind of food was...
and before and during the egg-laying dates at four...
elevations. There were very significant differ-...
between the amount of food available at the dif-...
elevations at the time egg-laying was initiated at...
elevation. This indicates that the food supply is...
the factor determining the time of egg-laying.

The Life-Cycle and Ecology of *Elliptio hopetonensis* Lea

LYNN RAULERSON, Howard College
W. D. BURBANCK, Emory University

The fresh-water mussel, *Elliptio hopetonensis* Lea, is...
of the major faunal forms of Lake Creek, a tributary...
the Altamaha River system. The life-cycle of this...
is characterized by the development of gametes...
fertilization in late summer, an overwintering of...
veloping larvae in marsupial gills, and emergence of...
glochidia in late spring. Parasitism of fish by...
chidia does not appear to be host-specific. The...
of parasitism is approximately thirty days, after...
glochidia leave the fish to develop as juveniles...
persal of this mussel may be accounted for by the...
ements of infected fish. Adults probably live for...
new years, and except for those carried by flood waters...
to remain in a limited area characterized by a rocky...
strate and a abundance of plankton. Usually as-...
sated with *Elliptio hopetonensis* is the commensal...
late *Conchophthirius anodontae* (Ehrenberg).

Comparative Observations on the Behavior of Marine and Fresh Water Turtles

FRED K. PARRISH, Agnes Scott College

The observations reported below were made as a...
frame of reference for projected physiological studies...
to explain certain aspects of turtle behavior. These...
observations were made on 29 marine turtles (4 species)...
at Marineland, Florida, and on 11 fresh water turtles (4...
species) maintained in a greenhouse tank 1 meter x 3.4...
meters with a depth of from 2.5 cm. to 54 cm. Only...
occasionally did one turtle bite another at Marineland...
females being more prone to this activity. The fresh...
water turtles have ignored each other, despite a wide...
difference in size. Sea turtles use their foreflippers as...
"wings" to "fly" through the water; the hind flippers

normally serve only as elevators or rudders (when turn-...
ing). Fresh water turtles use all four feet as paddles...
held square to the line of motion; fore and hind feet on...
opposite sides move synchronously. Scratching, which...
is so characteristic of sea turtles, has been observed in...
the fresh water forms. The respiratory patterns of sea...
turtles reported by Parrish, 1958, have been undetectable...
in fresh water chelonians.

Ecology of the Microbiota of Mission Bay, California, in the Summer of 1961

JAMES B. LACKEY, University of Florida

Mission Bay and adjacent waters were studied, June-...
August 1961. The microbiota showed qualitative dif-...
ferences varying from distinctly different poulations...
small isolated baylets to a few species in the main bay...
which were different from the oceanic outer waters...
The Bay had its own blooms, some of which were syn-...
chronous, but was subject to invasion by oceanic species...
Many of these failed to maintain themselves in the Bay...
It is evident that many differences exist between Bay and...
Ocean habitats, but some ubiquitous species are equally...
at home in either.

A Live-Trap Study of Seed-Eating Mammals

H. E. SHADOWEN, Western Kentucky State College

A 27-month study of small mammals was made in a...
cutover, shortleaf-loblolly pine-hardwood forest in north...
Louisiana. Two plots were established, one of which was...
burned to study the effect of controlled burning on small...
mammals. One hundred live traps were used on each...
plot. Animals were trapped, marked, and released...
Length of trapping periods varied from five to six days...
Species trapped included *Peromyscus nuttalli*, *Peromys-*
cus gossypinus, *Reithrodontomys fulvescens*, *Pitymys*
pintorum, and *Blarina brevicauda*. The two species of...
Peromyscus were retrapped in sufficient numbers to...
calculate home range and density. The mean home...
range of *Peromyscus nuttalli* was 1.31 acres, and the...
highest trap-revealed density was 2.79 mice per acre...
The mean home range of *Peromyscus gossypinus* was 1.12...
acres, and the highest trap-revealed density was 1.22...
mice per acre. The controlled burning of one plot had...
a negligible effect on the small-mammal population.

Crater Density and Above-Ground Activity of Two Dominant Old Field Ants

ARNOLD VAN PELT, Tusculum College

For the past twelve years investigators associated with...
the University of Georgia Ecological Research Team...
have been intensively studying and analyzing the dy-...
namics of abandoned crop fields on the Savannah River...
Plant, South Carolina. Ants are a dominant animal...
form in these old field situations. To learn more of the...
role of ants in the old field community dynamics, the...
present investigations were carried out during the sum-...
mer and fall. Density of one of the two dominant ant...
species, *Dorymyrmex pyramicus*, as expressed by the...
number of craters present, increased to a maximum in...
September. The greatest density of *Dorymyrmex* craters...
was in a portion of a field in which the *Andropogon*...
clumps were discrete and well-spaced. *Pogonomyrmex*...
badius, the other dominant ant, maintained fewer nests...
the most favorable areas for the mounds were well-...
drained slopes. *Dorymyrmex* averaged one crater per...
2.7 square meters, and in contrast, there was a *Pogono-*
myrmex nest for approximately every 820 square meters...
In *Dorymyrmex*, optimum temperature for above-ground...
activity was 40° C., while 57° C. caused a diminution...
or cessation of activity. These ants remained active