37. Barras, S. C., M. S. Carrara, R. A. Dolbeer, R. B. Chipman, and G. E. Bernhardt. 2000. Bird and small mammal use of mowed and unmowed vegetation at John F. Kennedy International Airport, 1998 to 1999. Proceedings Vertebrate Pest Conference 19:31-36. *Abstract:* We evaluated bird and small
mammal use of two mowed (15 to 25 cm height) and two unmowed vegetation plots (40
to 88 ha) at John F. Kennedy International Airport (JFKIA), New York, in 1998 to 1999
to determine which management strategy would best reduce wildlife use of the airport.
We counted more birds per 5-minute observation period in unmowed plots than mowed
plots in both 1998 (9.0 versus 7.9) and 1999 (11.7 versus 8.6). Maximum vegetation
height was greater ($P<0.05$) for unmowed areas than mowed areas after mowing commenced in 1998 and 1999 for each two-week monitoring period. In 1998 to 1999,
vegetation density was also higher ($P<0.05$) for unmowed plots for 13 of 14 sampling
periods. The species composition of vegetation differed ($X2=20.54$, $df=3$, $P<0.01$)
among mowed and unmowed plots. Mowed plots contained a higher percentage of
grasses (81% versus 68%), and a lower percentage of forbs (16% versus 25%) and
woody plants (1% versus 4%) than unmowed plots. Vegetation was generally sparse in
both unmowed and mowed plots, a consequence of the poor, sandy soils on much of
the airport. We captured 33 small mammals from three species in unmowed plots and
12 individuals of one species in mowed plots in 1999. Small mammal populations
increased seasonally in unmowed plots, but remained constant in mowed plots over the
same time period. We recommended JFKIA switch from the unmowed vegetation
management regime in place since 1986 to a regime of maintaining vegetation mowed
at 15 to 25 cm height. This management strategy should reduce bird and small mammal use of grassland areas at JFKIA. Further research should examine use of
alternative vegetation types to improve ground cover and vegetation density at JFKIA
while minimizing attraction to wildlife.