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Painted Bunting Status in the Southeastern Atlantic Coastal United States

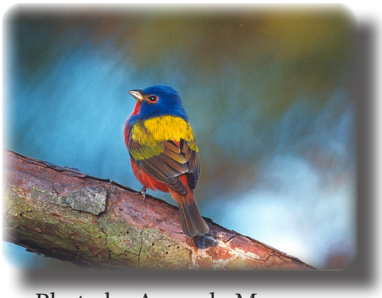

Photo by Amanda Morgan

- ***The Challenge:*** Painted Bunting research on two Atlantic coastal islands (Sapelo Island, 1996-2000 and St. Catherines Island, 1998-1999) provided indicates that under proper management, barrier islands can provide source or optimum breeding habitat for the bunting. However, most of the Painted Bunting's breeding habitat is found on the coastal mainland where major landscape changes have taken place during the last 30 to 40 years. Loss of habitat or habitat deterioration on the mainland may have caused losses of more than 50% of the bunting's population since 1966 (Breeding Bird Survey, BBS). Nesting areas of the Painted Bunting in the coastal states of North Carolina (NC), South Carolina (SC), Georgia (GA), and Florida (FL) are scattered. Available data on Painted Bunting breeding habitat, range, status and relative densities are scattered and may be limited (BBS, atlases, state surveys). A cooperative research effort is needed to provide information for recovery of the bird's population in the southeastern Atlantic coastal states. As an initial step, a database on the Painted Bunting is needed to provide information on the breeding status, ranges, and threats to the species in areas thought to be ideal for breeding habitat.

Optimum habitat with person in view for size

- ***The Science:*** My first objective is to gather all available data for Painted Buntings for the states of North Carolina, South Carolina, Georgia, and Florida. This would include state breeding bird atlas data and Breeding Bird Survey data as well as any other reliable sources. In addition, my second objective is to determine Painted Bunting breeding densities using distance sampling at point counts in the four states and provide these data in a GIS format. I collected Painted Bunting density data in maritime shrub, shrub-scrub, very young pine forests, maritime oak (associated with saltwater marshes), developments, and open pine (sawtimber) habitat. These habitats provided breeding requirements for the bunting based on our landscape research on Sapelo Island and St. Catherine Island during 1996-2000. Data from more than 600 sampling sites in the four states indicated that the highest densities for Painted Buntings occur in maritime shrub. Painted Buntings were detected at 33.5% of points surveyed for 5 minutes. Densities varied from 9 singing males per km2 in young pine plantations to 42 per km2 in maritime shrub. Developed lands provided habitat for Painted Buntings, but at densities 4 to 13% less than on undeveloped land.

Development - almost all natural front lawn in MO habitat

- ***The Future:*** Results of this study, in addition to other studies recently completed by the Southeastern Painted Bunting Working Group et al., provide reliable methods for managers to estimate densities and baseline data for setting management goals for the species recovery. Recent information from the Breeding Bird Survey on Painted Bunting habitat indicates that declines may have leveled or increased in some areas. Research on sea level rise and climate change related to Painted Buntings may also produce further information for management of this priority species.

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