

FEATURE ARTICLES

**SEED PREFERENCES OF WINTERING HENSLOW'S SPARROWS**

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*Abstract.* The Henslow's Sparrow (*Ammodramus henslowii*), a species of conservation concern, winters primarily in longleaf pine (*Pinus palustris*) forest ecosystems in the southeastern U.S. These pine savannas have been reduced to 5% of their former range, with remaining patches requiring active management with fire to maintain characteristic structure and plant diversity. Wintering Henslow's Sparrow abundance tracks growing-season fires; bird abundance peaks in the winter following burning, then declines in subsequent winters. Fire also determines dominant plant species, suggesting that Henslow's Sparrows may respond to abundance of preferred seeds. To determine diet preferences of Henslow's Sparrows, we tested seeds from eight species of native plants from southeastern Louisiana pine savannas, including species common in the first winter after burning ('fire grasses') and species that increase in abundance in the second and subsequent winters after burning. Seed consumption by individual birds differed considerably, suggesting that Henslow's Sparrows forage on a variety of resources in the highly diverse savannas. Henslow's Sparrows preferred fire grasses, especially *Muhlenbergia expansa* (cutover muhly). They also preferred *Dichanthelium angustifolium* (needleleaf rosette grass), a species more common in the second year after burning, but consumed relatively little of the sedges *Rhynchospora plumosa* (plumed beaksedge) and *R. gracilentia* (slender beaksedge), species common in the second winter after fire. Birds consumed almost none of the ubiquitous grass *Schizachyrium scoparium* (little bluestem). These results suggest that preferred seeds may include those that are most common in the first winter after burning, but that some suitable seeds are available for at least another winter.

*Key words:* *Ammodramus henslowii*, *captive*, *choice*, *feeding experiments*, *Henslow's Sparrow*, *seeds*.