

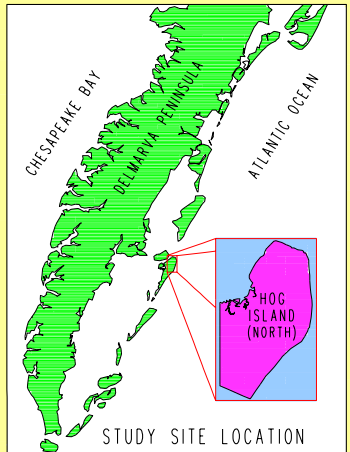
# SHRUB THICKET DYNAMICS ON HOG ISLAND, VA

## METHOD

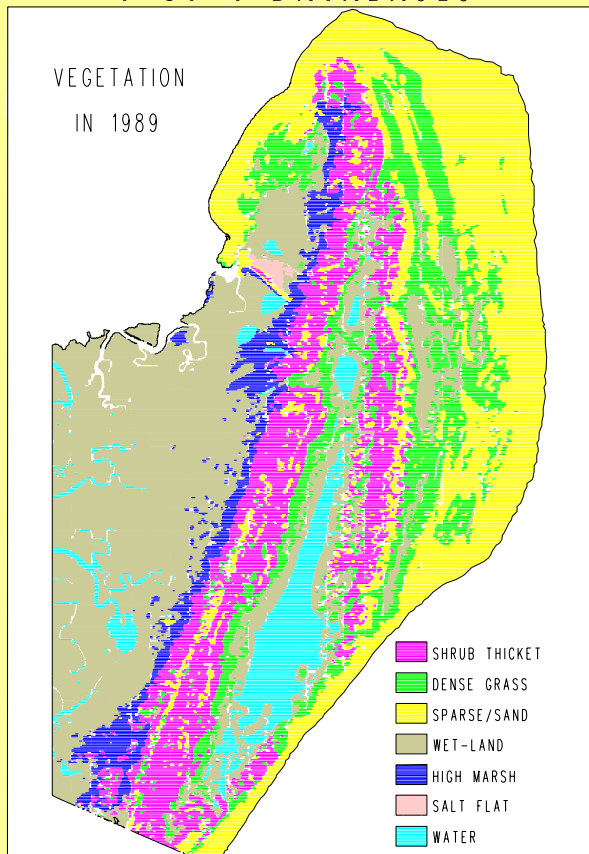
Four-year vegetation databases in 1949, 1962, 1974, and 1989 were created from black/white and infrared false color aerial photographs. Vegetation classifications were made using ERDAS for the color photographs. Coordinate rectifications and database overlays were accomplished using ARC/INFO.

## DISCUSSION

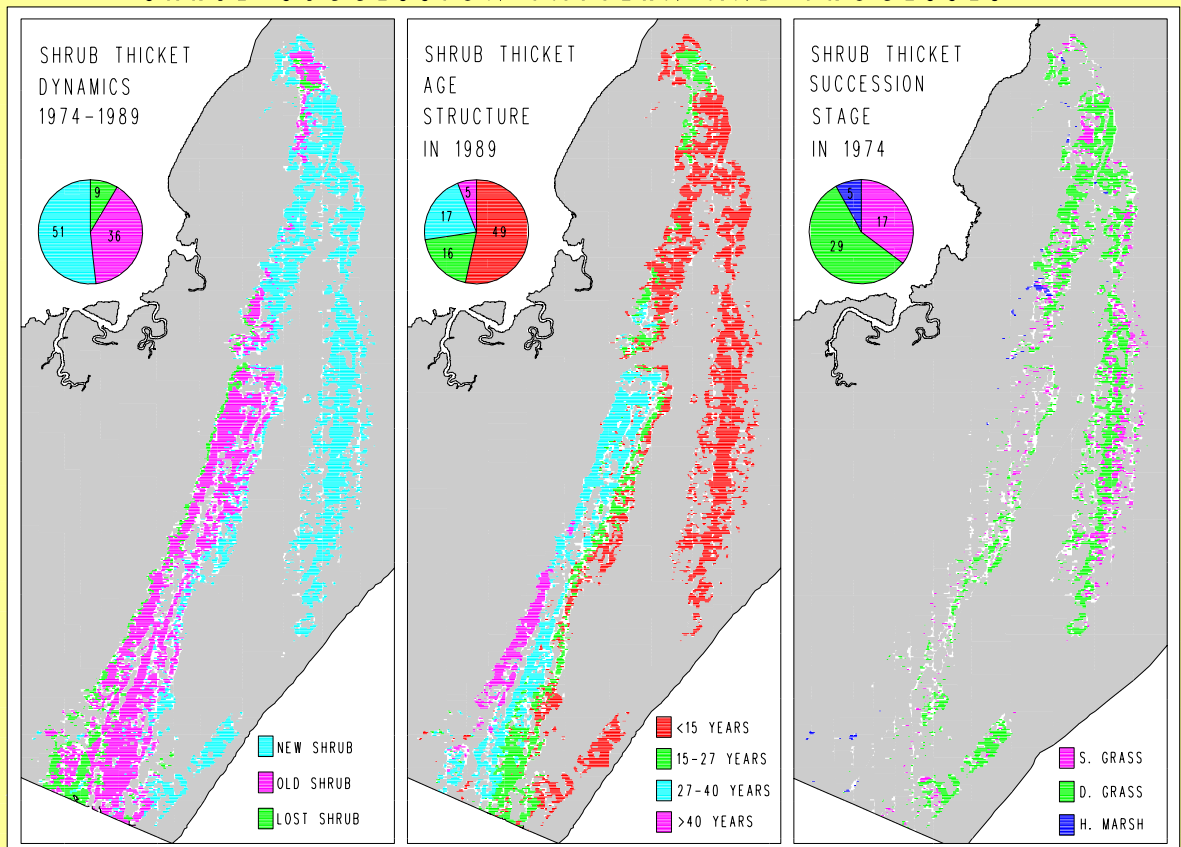
Vegetation succession on Northern Hog Island is progressive. Shrub thickets have been spreading at a high rate. The spreading direction is toward the ocean. Shrub dieback happened along the bayside, but at only 1/5 the rate at which spreading occurred. Shrub distributions in ringlike shapes around dunes indicate that ground water may be important in controlling shrub dynamics.



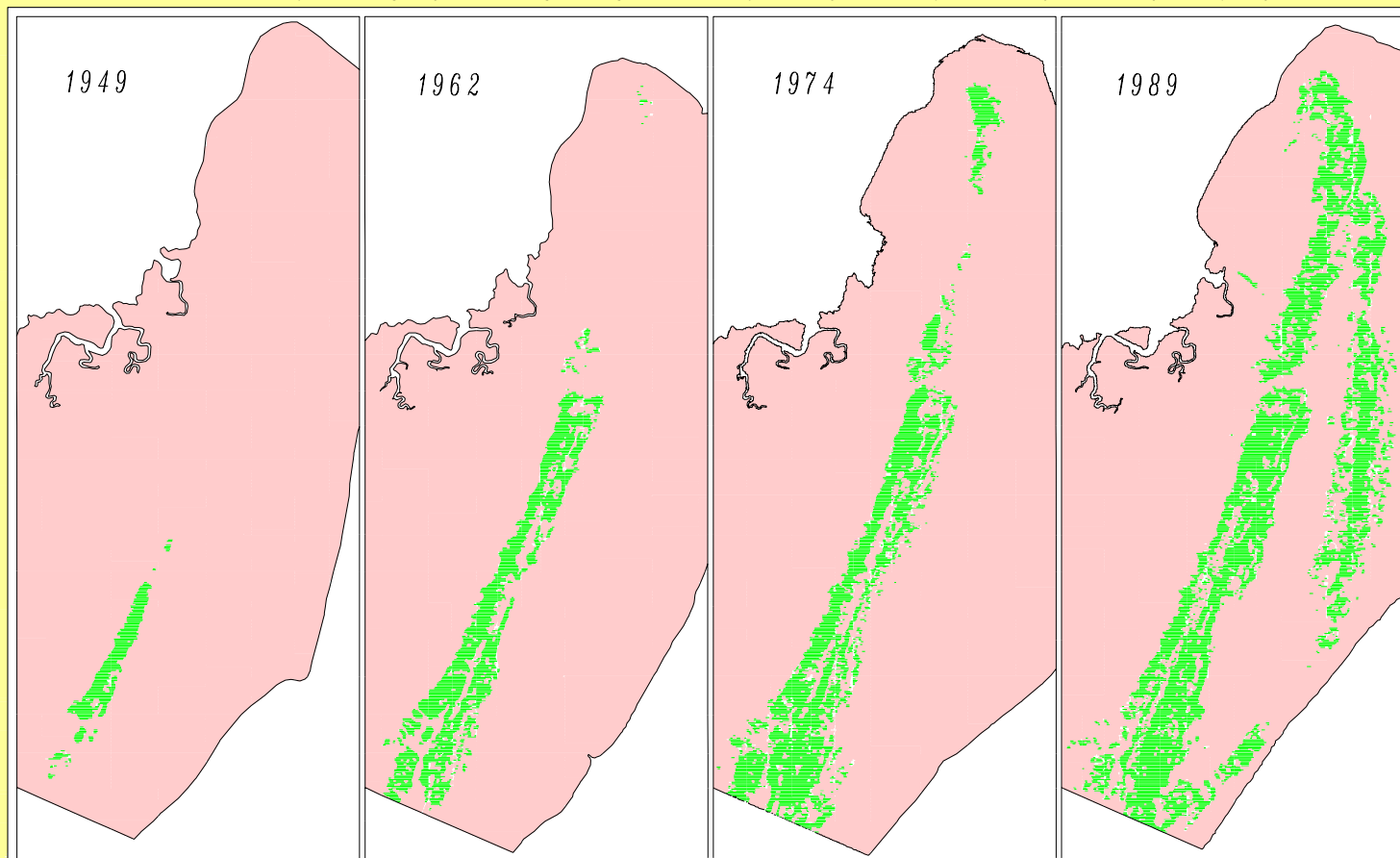
## 1 OF 4 DATABASES



## SHRUB SUCCESSION PATTERN AND PROCESSES



## TEMPORAL CHANGES OF GEOGRAPHIC DISTRIBUTIONS OF SHRUBS



VIRGINIA  
COAST  
RESERVE  
LONG-TERM  
ECOLOGICAL  
RESEARCH

GUOFAN SHAO  
JOHN PORTER  
HANK SHUGART  
APRIL 1992

