



## Managing fields

The extensive field and ditch system created to support agriculture, hunting and cattle grazing helped shape the flora and fauna on the Island. The Walkers created most of the fields in the 1960s for crops and quail hunting. Many of the original fields are now on private properties or are part of the golf course.

The number of agricultural fields in the Southeast has declined sharply during the last several decades. Several species of birds that were plentiful when agriculture was dominant have declined precipitously as former fields convert to forests or become part of new suburbs. The bobwhite quail, for example, has all but disappeared from its former range.

Spring Island's fields help to perpetuate the Island's original sense of place. The mosaic of cultivated and fallow fields helps preserve the rural character and provides a reminder that Spring Island was once a working plantation.

### *Disturbance and fallow fields*

Native plants can be more beneficial to wildlife than planted crops and are much cheaper to produce. Native plants ("weeds" to the casual observer) attract insects, which provide protein for birds, especially those feeding their young. Often referred to as "bugging fields," the fallow fields must be disturbed periodically to provide bare soil in which the airborne seeds of these plants can germinate. Burning and disking accomplish this. The weedy species that come in after soil is disturbed depend upon several factors: the time of year disking is done, the number of times the area is disked, the seeds in the soil and the type of vegetation in the surrounding areas. In our region, late fall and winter disking has been shown to be most effective at producing high quality bugging fields.

Rotational disking is used in larger fields, where portions of a field are disked each year. The end result is a mosaic of perennial grasses and annual forbs that provide both bugging areas and cover. Like disking, prescribed fire exposes mineral soil and helps to break down thatch, which can impede the ability of small birds such as ground-feeding songbirds and baby game birds to forage for food.

### *Agricultural fields as habitat*

Some fields are planted with edible crops for Spring Island members, while other fields are planted to feed wildlife and improve roadside aesthetics. Typical warm season crops include millet, sorghum, Egyptian wheat, corn and soybeans. Cool season crops include naked oats, winter wheat and winter peas. The Trust continues to experiment with new crop species, such as sesame and partridge pea.

After a field is plowed “clean” the weedy borders may be the only cover left. For this reason crop stubble is often left in fields for months. Weedy strips of vegetation are left to provide feeding areas and hiding spots for insects, fox squirrels, birds and deer.

### *Use of fertilizers*

The soils of Spring Island are sandy and acidic with a pH of less than 7. Lime and fertilizer are applied to raise the pH, which helps grow healthy crops. Horse manure from the barn that has been properly “seasoned” is also used to improve the organic content. The Trust regularly takes soil samples from each field and sends them to Clemson University for analysis. A detailed report of soil chemistry recommends the additives that are needed to maximize production.

### *Use of pesticides in fields*

Herbicides are used in fields and field borders where non-native invasive plants have become established. Fields are often the first places in which invasive species become established because they are constantly being disturbed.

The Trust rarely uses insecticides in fields managed for wildlife. Insects are a valuable food source for wildlife and contribute to the overall diversity of the island.