



Fall Feast

Many migrating birds depend on wild rice.

Maybe you've purchased wild rice for your dinner table, but did you know that it's on a number of other species' diets right here on the Maurice River

each fall? Many different kinds of birds use wild rice as important sustenance for their fall migrations. Redwinged blackbirds (aka red wings), sora railbirds, and several kinds of ducks all feast on grains of wild rice. In our area, we have red wings year round but many others breed to the north of us, primarily in Canada. These migrants are added to our resident population each fall when they fly south. Blackbird species often fly in mixed flocks making for some amazing displays of winged aerobatics. At times they appear in low-lying clouds, swirling en masse with a synchronicity of motion that mesmerizes even the non-birding viewer. Their wings produce a whooshing noise over marsh and farm field alike.

The largest remaining stands of wild rice are right here along the Maurice River and two of its tributaries, the Manumuskin and Menantico rivers. Red wings come into the rice and hang on its shafts, stripping the grains from the wispy flaxen tassels. The males' red epaulets flash brilliantly against their black satiny feathers. The females have the luxury of a mottled plumage in various shades of streaked brown; this camouflage is especially useful when

incubating or evading predation. At times, the feeding masses produce a cacophony that gives voice to their frenzy and is hard to speak over.

Sora rails are quite the opposite. secretive and skulking, wading along the mudflat and weaving between the stands of wild rice and other marsh vegetation. They let out a bit of a call, a dee, when flushed, that might be your only chance to catch a glimpse of one, unless you happen to push a skiff over the marsh at flood tide. In fact, game hunters have been doing just that for centuries. During the late 1880s and early 1900s it was a fashionable sport to hire a pusher to guide you over the top of a marsh in a railbird skiff. This endeavor was popular along the Maurice, Salem, and Cohansey rivers. It wasn't uncommon during high moon tides to see the limousines of wealthy Philadelphia sportsman parked in Mauricetown when they hired local guides to take them on a hunt. The season is still enjoyed by local hunters and visitors, but it is much less prevalent. Sora rails are not resident birds but are here during migration. They breed in northern New Jersey and north into the lower provinces of Canada.

These are but two examples of wild rice-dependent species. The rotting of vegetation in the marsh creates detritus that supports small invertebrates, and these, along with marsh roots and their seed, all sustain numerous waterfowl and aquatic species. The wild rice supplies a critical link in the food web, such that scientists consider it a keystone species.

A keystone species is one on which an ecosystem is largely dependent; if lost, it would cause a domino effect of dramatic change in an ecological community. Put another way, the loss of particular species such as wild rice can precipitate further extinctions. Today, wildlife biologists don't focus as much on keystone species. Current efforts to preserve diversity center more on biological communities, which lead to more habitat approaches. This makes wild rice that much more important a factor.

The wild rice in our local wetlands is not without threats. Wild rice is a freshwater tidal species, meaning that it is present in tidally influenced waters with lower salinity levels. Near the mouth of the river, where it meets the

Delaware Bay, waters are saltier. In these regions, spartina or cord grass are the predominant species.

Conversely, further upstream on the Maurice, beyond the Manumuskinfs entrance, is where wild rice thrives. You may be familiar with the concepts of sea level rise and saltwater intrusion. In combination, the pumping of freshwater being replaced by salt water, plus rising seas, continues to move the salt water line upstream. This encroachment means the freshwater vegetation is retreating upstream as well. The non-native invasive phragmites (common reed) is also crowding out the rice and everything else in its path.

Year-round Canada geese offer additional threats. Geese generally break off grasses, but because of the soft substrate the plants are entirely uprooted as they feed on them. Canada geese at one point in time migrated through our area. But introductions of juvenile geese have caused them to imprint on areas instead of migrating northward. These yearround invaders have crowded out native avian populations and they cause serious pollution issues, diminish buffers, and create numerous other problems.

CU Maurice River is continually looking for solutions to maintain wild rice communities and other complex natural history issues.

To read about other fall happenings, visit CU's online Natural History Calendar at cumauriceriver.org/about/events/