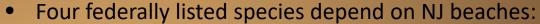
Swamp Pink (Hellonias bullata), federally listed as threatened



- NJ is the rangewide species stronghold, with over 60% of all populations.
- Most NJ populations are declining.
- For 63 extant NJ populations surveyed 2010-2013, invasive species were observed at the majority of sites.
- Invasives were directly impacting some populations.
- The most common invasives impacting swamp pink were:
 - Phragmites australis (common reed)
 - Microstegium vimineum (Japanese stiltgrass), often associated with drawdown of the water table.
- Other species found impacting swamp pink habitat were:
 - Rosa multiflora (multiflora rose)
 - Lonicera japonica (Japanese honeysuckle),
 - Polygonum cuspidatum (Japanese knotweed)
 - Wisteria spp. (wisteria)
 - Vinca minor (periwinkle)
 - Celastrus orbiculatus (oriental bittersweet)







- Red knot (Calidris canutus rufa)
- Seabeach amaranth (Amaranthus pumilus)
- Piping plover (Charadris melodus)
- Northeastern beach tiger beetle (Cicindela dorsalis dorsalis)
- Numerous others, State-listed or special concern.
- Japanese (or Asiatic) sand sedge (*Carex kobomugi*) is a perennial adapted to beaches and dunes.
- Accidentally introduced, later deliberately planted; now occurs from Massachusetts to North Carolina.
- Spreads mainly by rhizomes and forms dense stands on dunes and beaches, outcompeting native vegetation, decreasing species richness, and degrading habitat for listed species.
- In the 2000s, one study documented exponential growth in the spread of Japanese sand sedge at two NJ sites that are known to support shorebirds.
- Similar large headed sedge (*Carex macrocephala*) documented at 3 NJ sites in 2005.

