

# HOW IT WORKS

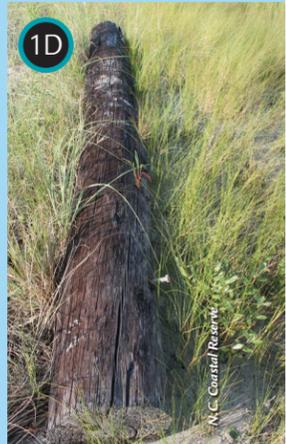
## STEP 1: MAP IT

(A) Everette Newton, a Duke University Marine Lab doctoral student, launches an eBee drone from the lab to map the Rachel Carson Reserve located across the Taylors Creek channel.

(B) A preliminary drone flight identified debris, including two pieces of lumber in the middle of the aerial image.

(C) The aerial imagery that the drone captured was reviewed by the team to identify any large marine debris items, like the channel marker located in the bottom left, on the Rachel Carson Reserve.

(D) An example of a large marine debris item — a piling — that washed up on the Rachel Carson Reserve.



## STEP 2: PLAN OF ATTACK

To decide which debris items to remove, the team compared habitat maps with aerial imagery. The feasibility of safely removing debris without damaging sensitive habitats was the top priority. At left, Brandon Puckett, Paula Gillikin and Rodney Guajardo, all from the N.C. Coastal Reserve & National Estuarine Research Reserve, discuss options with Everette Newton, far right, who is also mayor of Beaufort.



## STEP 3: MARINE DEBRIS REMOVAL

(A) Volunteers carefully collect debris identified from mapping for removal by hand.

(B) Volunteers from the N.C. Division of Marine Fisheries stack debris from a cleanup into the dumpster for disposal. Over 255 volunteers helped to remove more than 13,500 pounds of marine debris during the overall project.

(C) Large marine-debris items smothered vegetation. Removal revealed dead areas of wetland.



## STEP 4: HABITAT RECOVERY

(A) Students from Beaufort Elementary School raised native *Spartina alterniflora* seedlings to plant in an area where a piece of plywood had smothered the marsh grass. Site manager Paula Gillikin shows them the area where they will be planting seedlings to restore marsh grass.

(B) The damaged area — between white poles — was restored with marsh grass. The area was described as fully recovered within three months of planting.