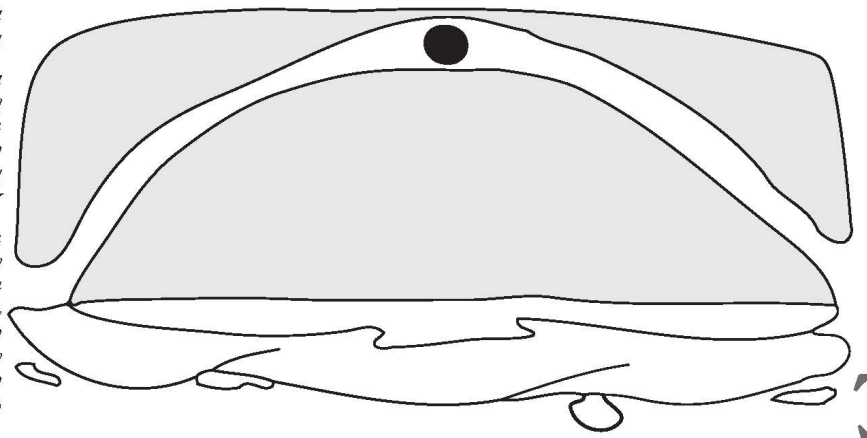
SIGNALS FROM THE DEEP

a project by smudge (smudgestudio.org)



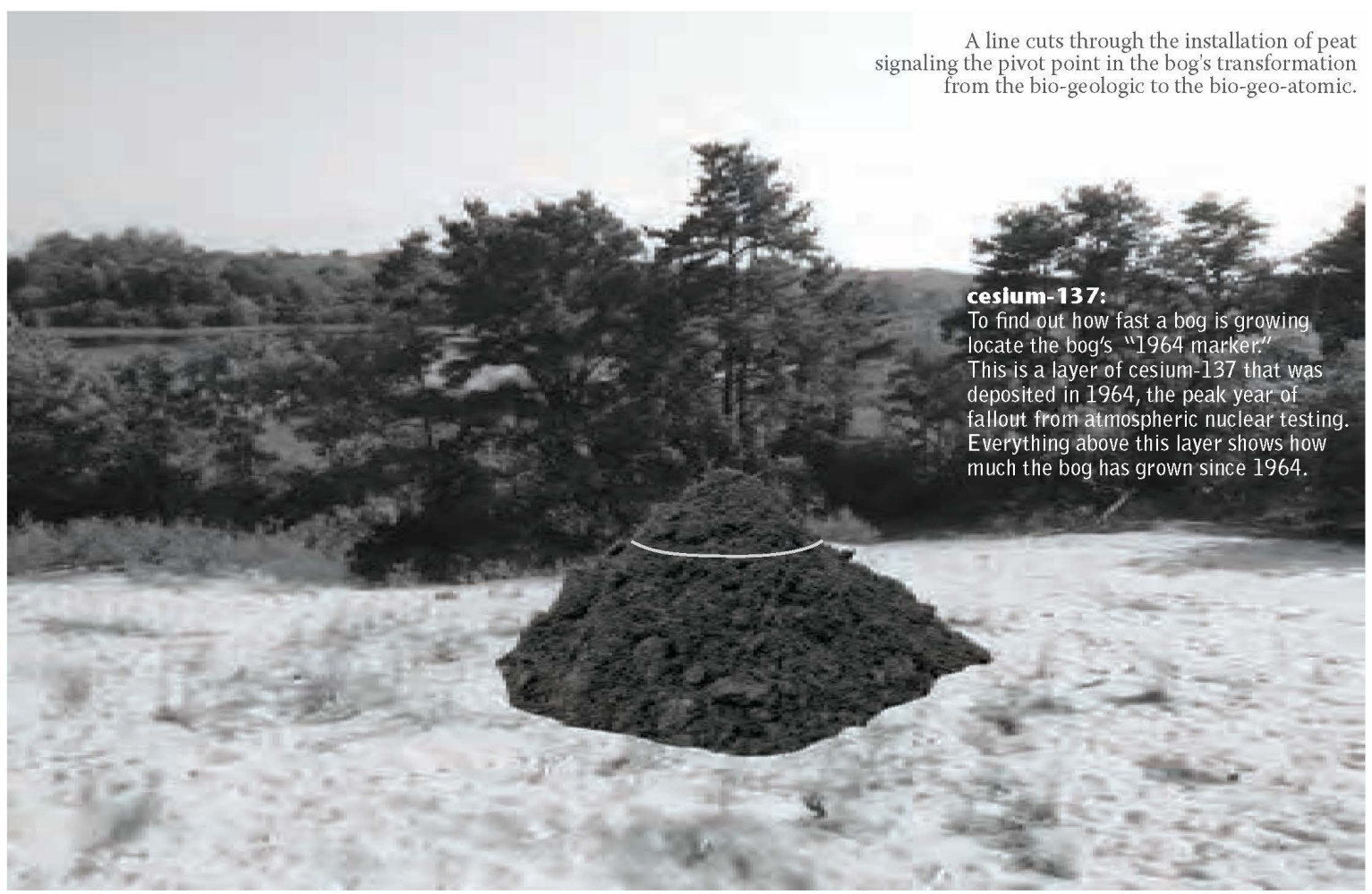
Signals from the Deep *is a creative response to the meeting of geologic, biologic, and atomic forces. These forces make the deep past, present, and deep future of Provincetown's quaking bog. Through this work we invite visitors to expand their capacities to sense and live in relation to geologic time.*

Geologic time is something that no human will ever experience directly. We will never watch an ice age glacier advance and then retreat, evaporating into great salt lakes. No human will ever observe the transformation of mountains into hills and coastal plains. We are able to sense such forces only in our imaginations.

And even that is in doubt. Some who study human perception believe that human evolution has left us cognitively unable to imagine the sheer vastness of deep geologic time because there was no evolutionary advantage to doing so.

Signals from the Deep *challenges the belief that it is futile for humans to try to sense geologic time and feel it as real. As works made in response to geologic time become more common and more artful, human capacities to live in relation to deep geologic time will grow.*

Humans are laying down the newest layer of the Earth's strata. This strata, composed in part by nuclear fallout, marks a new and starkly different layer in the planet's geological history. Our project is motivated by our experiences of these realities. They have made us ready to attempt to imagine and live in relation to deep geologic time (past and future).



A line cuts through the installation of peat signaling the pivot point in the bog's transformation from the bio-geologic to the bio-geo-atomic.

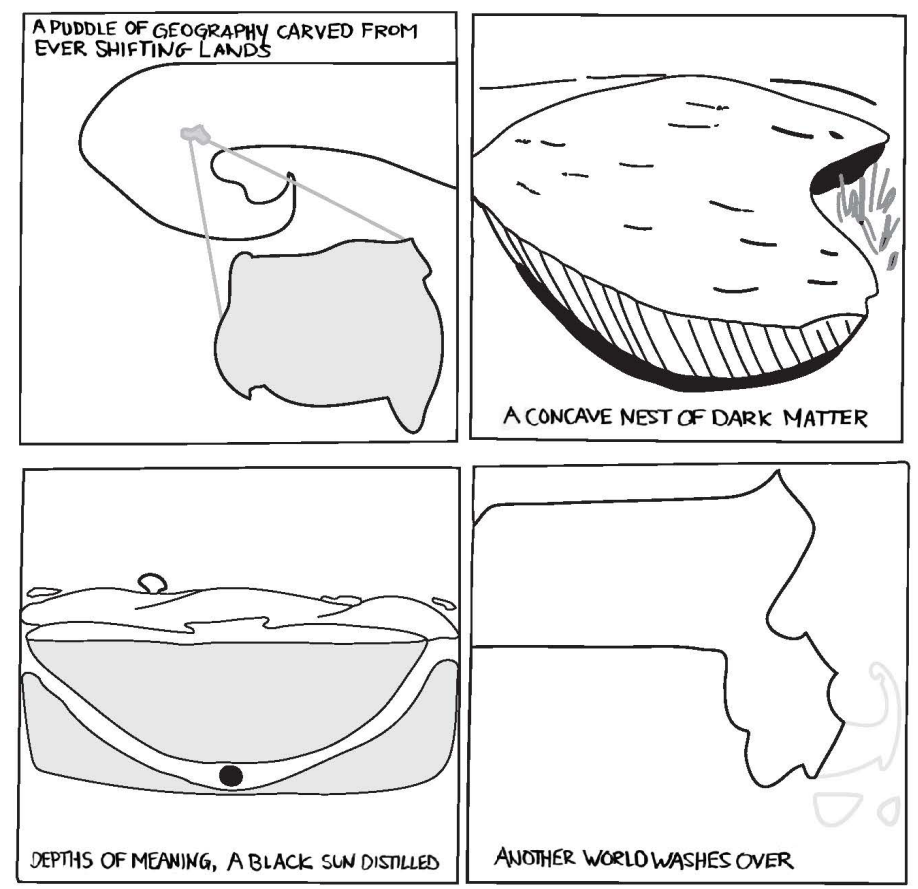
cesium-137:
To find out how fast a bog is growing locate the bog's "1964 marker." This is a layer of cesium-137 that was deposited in 1964, the peak year of fallout from atmospheric nuclear testing. Everything above this layer shows how much the bog has grown since 1964.

GRAPHIC EVIDENCE

laping waves. a few million years.

water to ice. a colossal sheet moves in and over. towering 10,000 feet. the ice pauses, stays awhile. thickens, spreads. rests here for 12,000 years. it slides and sets land in motion. picking up passengers along the way. tugging and heaving. great sculptor of earth. carving and breaking down. withdrawl. retreat. receding. backward melting. dissipating. dissolving. disappearing. draining. changing forms. vanishing act. gone.

in absence of ice, wind becomes the great shifter. eroding surfaces. sand is born. proliferated. creeps and swirls. a wild hook at the end of the earth grows. a bold and fragile form precariously transposed reaches into the ocean. extending its arm outward from the land. dips and bowls are carved from ever-shifting lands. collecting water. pooling.



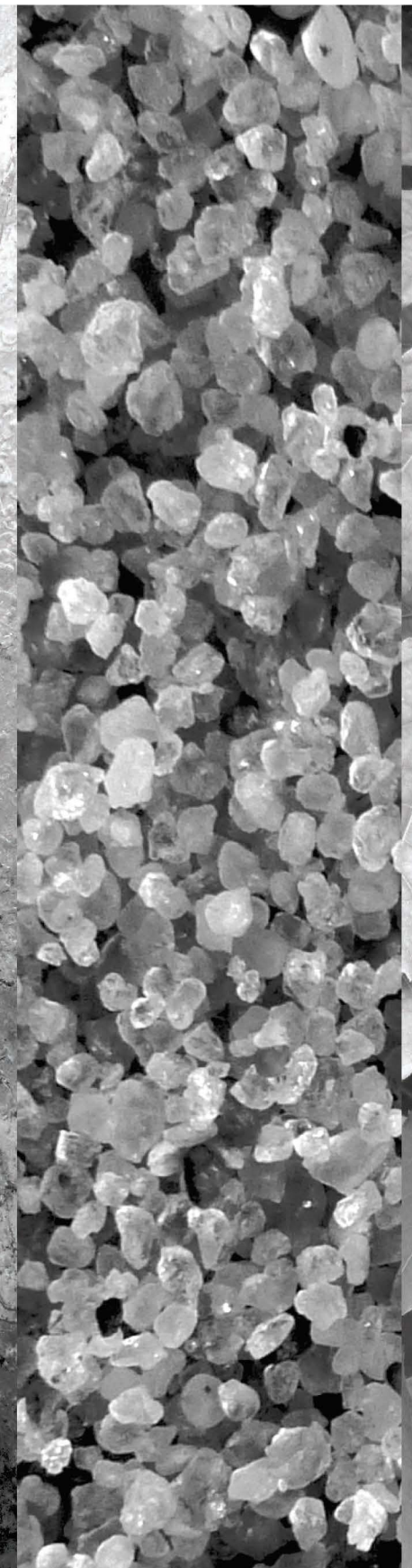
puddles of geography. trees and plants take root at edges. leaves fall. one by one. into opaque depths devoid of oxygen. falling bodies. twigs and organic mass pile in concave nests. leaves become sludge. dark matter. tar-like. solid liquid. teeming with transformation. breaking down. becoming heavier. darker. sinking deeper.

over deserts and oceans, enormous forces of energy released. wind picks up traces. dispersal. a global net. falling. out. the smallest of particles. atomic. travel here to form the bog's thinnest layer. depths of meaning. a black sun distilled.

a world to come is gathering. water will rush over, once again, yet differently.

water:
70,000 years ago there was no Provincetown or Cape Cod, the area was covered with water.

ice:
During the Wisconsin Stage of the last ice age the area was covered by over 10,000 ft. of ice (the Laurentide Ice Sheet).

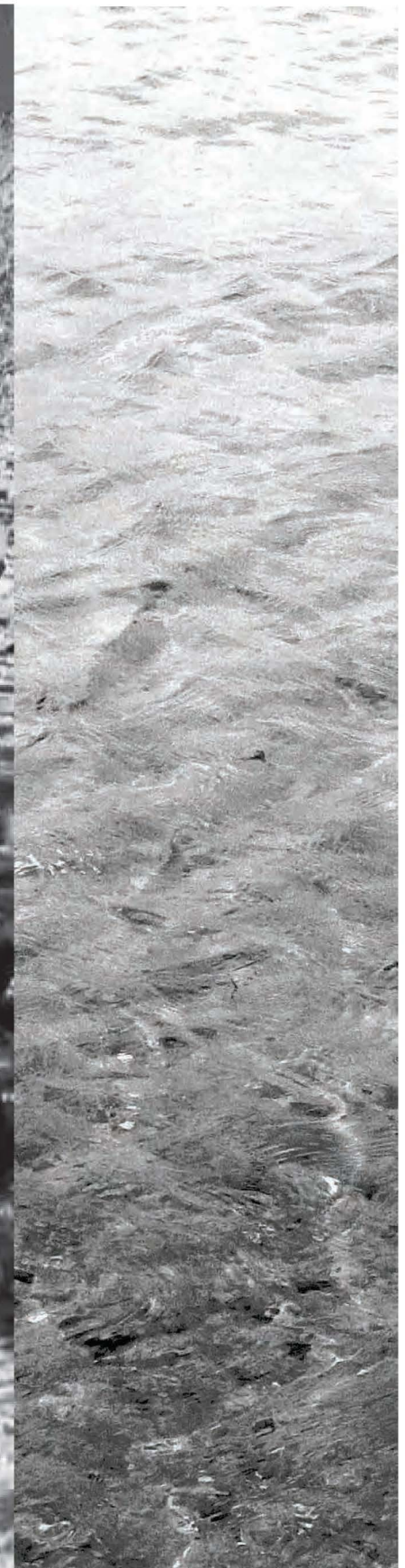


sand:
12,000 years ago the ice sheet retreated and deposited Cape Cod from Pilgrim Heights to the mainland. Since then, shore drifting of sand from the lower cape has continued to deposit and reshape the dunes of Provincetown.

plant matter:
Fresh water bogs form where the water table meets ground level. Surrounding plant matter falls and collects in the bog. As it decomposes in this oxygen starved acidic environment it forms peat.

peat:
A mere 1mm of peat accumulates annually on an average bog. It takes over 25,000 years for 3.5 feet of peat to accumulate. This line ▬ is 1 millimeter thick.

cesium-137:
Cesium-137 has also accumulated in this bog since 1951, the start of atmospheric nuclear testing. 1964 marks the peak year of concentration. (Photo courtesy of National Nuclear Security Administration / Nevada Site Office.)



water:
Depending on the rate of rising ocean levels, Provincetown will once again be covered with water sometime between 100-15,000 years from today.