# Evaluation of Excavator Low Ground Pressure Mat in Wetlands

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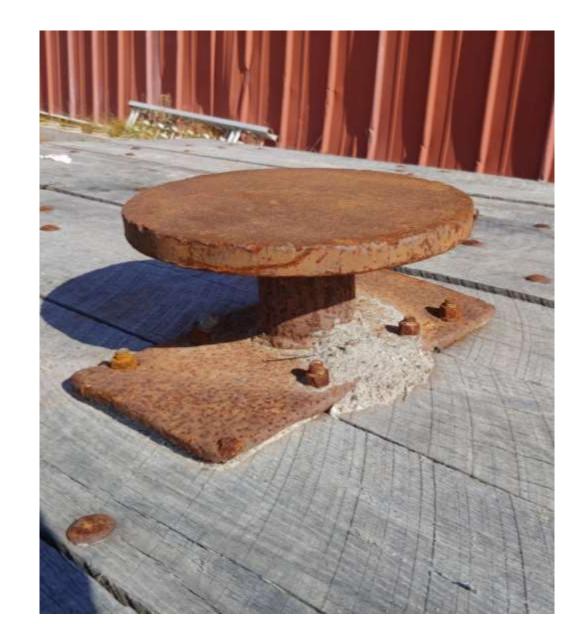
## 1999 Link-Belt Quantum 1600



- 2 PSI
- Lengthened/ widened tracks
- UpgradedDrive Motors
- Articulating Bucket



- Portability
- Maneuverability
- Ground Impact
- Durability
- Easy of use



## 2014 John Deere 35 G



- 4.8PSI
- Standard Arm
- Thumb
- Stock Tracks











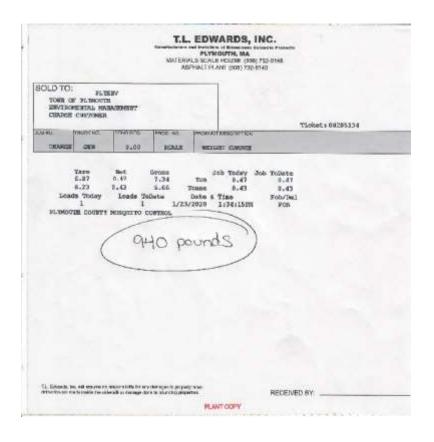


**Price**: \$2,750 Each

Weight: 940 Lb each

**Dimensions: 96 in x 90 in Planned** 

96.5 in x 91 in Actual



#### Weight

Mat: 940 LB

Excavator: + 8,135 Lb

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**Total**: 9,075 LB

#### **Mat Area**

96.5 in x 91 in = 8,781.5 Sq In.

#### **Ground Pressure**

9,075 Lb  $\div$  8,781.5 Sq In. = 1.03 PSI

Stock Ground pressure - 4.8 PSI Modified Excavator - 2.0 PSI











### Lydia's Island Salt Marsh Wareham, MA





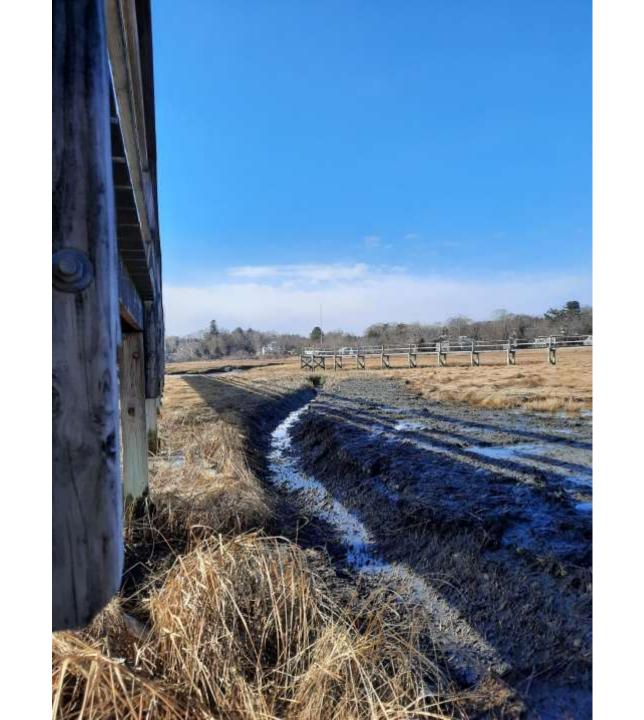






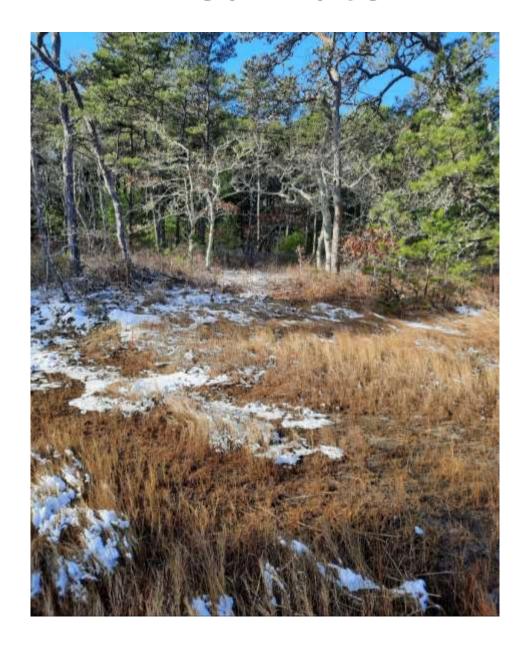








## 1 Year Later













## Pro

- Cheaper
  - \$5,500 vs \$100,000 upgrade
- Lower PSI
- Keep manufacturer warranty on excavator
- Tracks stay out of the salt water/mud
- No turning/tracking directly on wetland

## Con

- Slower
- Can't use on very uneven surfaces
- Extra steps to move to a new job
- Wouldn't be able to use rotary ditcher/brusher

