

Hydrilla: A Growing Problem in New Jersey

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New Jersey Invasive Species
Strike Team Conference

Hydrilla verticillata – the perfect weed

- Native to Asia
- Means of introduction: aquarium plant
- Recent invader to Mid-Atlantic (1980s)
- Reproduces by fragmentation, tubers, & turions
 - Tubers can remain viable 6+ years
- Can reach lengths of up to 25 feet
- Can grow up to 1 foot per day!



2017 Management Season in Review

- Developed D&R Canal SAV Management Plan
- Engage Canal water customers (drinking water, irrigation)
- 120-day low dose continuous injection application of Sonar Genesis herbicide
- Monitoring:
 - Herbicide concentrations
 - SAV monitoring (60 miles)

September 8, 2016

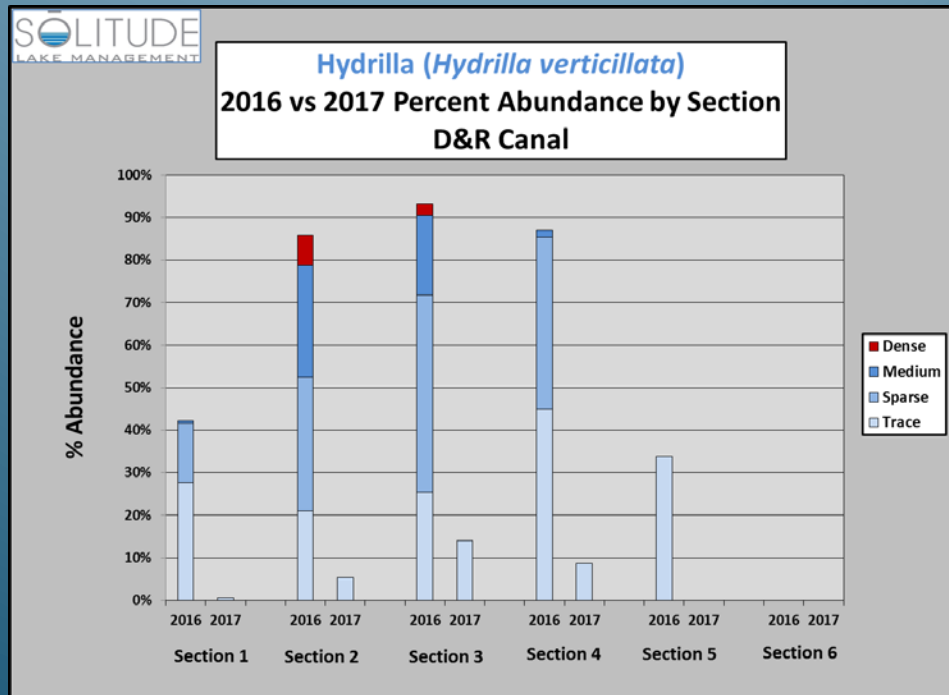


September 8, 2017



2016 vs. 2017 SAV results

Treatment Area			
Common Name	Scientific Name	2016 % Occurrence	2017 % Occurrence
Overall SAV		96.5%	76.7%
Coontail	<i>Ceratophyllum demersum</i>	84.9%	26.0%
Water Stargrass	<i>Zosterella dubia</i>	66.8%	28.8%
Hydrilla	<i>Hydrilla verticillata</i>	56.4%	5.2%
Wild Celery	<i>Vallisneria americana</i>	52.4%	39.5%
Common Waterweed	<i>Elodea canadensis</i>	32.8%	7.0%
Benthic Filamentous Algae		31.7%	43.6%
Brittle Naiad	<i>Najas minor</i>	24.0%	0.2%
Eurasian Water Milfoil	<i>Myriophyllum spicatum</i>	10.1%	0.8%



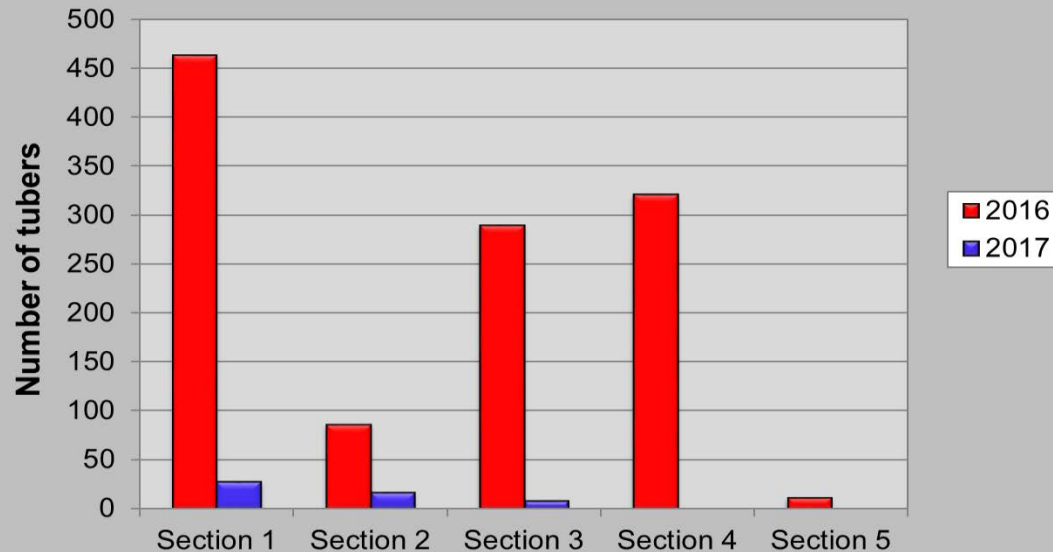
Tuber monitoring – 2016 vs. 2017

Tuber Sampling Stations	2016 (tubers/ m ²)	2017 (tubers/ m ²)	% Change
DR-1	462.8	26.5	94.27
DR-2	85.6	15.2	82.24
DR-3	288.9	7.6	97.36
DR-4	320.4	0	100.00
DR-5	10.7	0	100.00



SOLITUDE
LAKE MANAGEMENT

**2016 vs. 2017
Number of Hydrilla Tubers**



HYDRILLA: TREATED VS. UNTREATED



**Manasquan Reservoir
(no treatment)**

8/10/17
← Manasquan Reservoir
← D&R Canal

**D&R Canal
72 days of
low-dose
Sonar Genesis**

2018 Hydrilla Management

- **D&R Canal:** up to 120-day low dose Sonar Genesis application
- **Manasquan Reservoir:**
 - develop SAV & algae management plan
 - 4-acre pilot herbicide treatment: Sonar H4C
- **Education & Awareness**

