

Penobscot
2017



Rite in the Rain.

ALL-WEATHER
UNIVERSAL

Nº 373



Name _____

Address _____

Phone _____

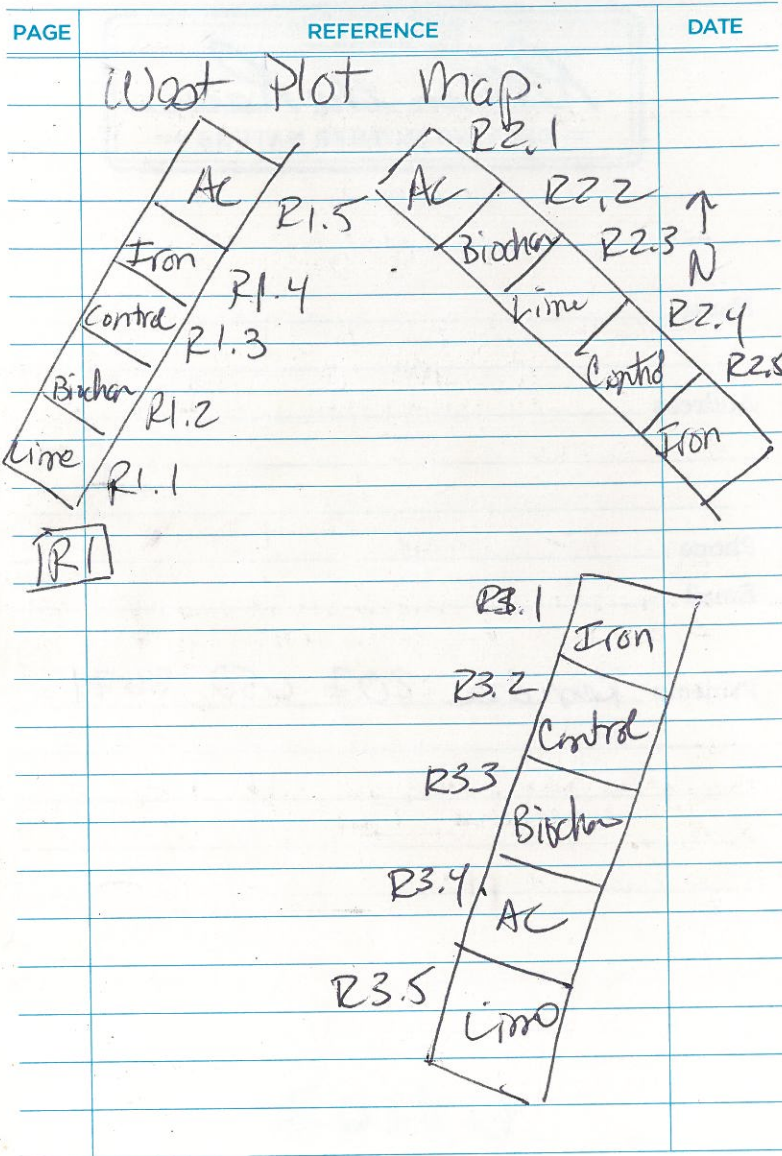
Email _____

Projects Kendra 207 650 8671



RiteintheRain.com

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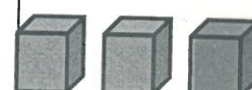
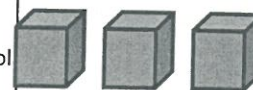
Penobscot September 17-20, 2017

Sites

Central 3X3' plots

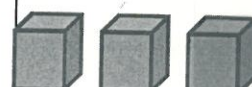
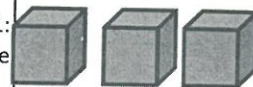
West 3X3' plots

Unamended Control



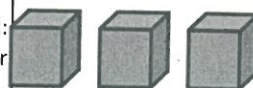
Amendment #1:

Activated carbon/Sediment



Amendment #2:

Biochar



TOTAL # OF PLOTS

2 Sites
3 plots per treatment
3 treatments

18 PLOTS

POREWATER

Take 2 PW samples (2x60mL syringes in 2 different spots) and composite
PW DUPs: Take 1 extra 60mL syringe to add to composite for 6 of the 18 plots
Sampling depth: _____ cm

BLANKS: Field filtered DI with preservative acid (250mL PETG)

SEDIMENT

Take 6 sediment plugs in four different spots and composite for analysis
Sampling depth: 0-3 cm

Take 4 BIG cores (4.8x15cm) in each plot

Section 7 depths at intervals TBD based on visual assessment
Depths sections will be the same for all cores and plots
Combine each section from all four cores in each plot

Scale: 1 square = _____

Rite in the Rain

Sunday 9/17/2017 Messtenger

Technician(s): Ally, Tyler, Ceng

Start Time:

Sites Sampled: 3:30 pm

West & Central

Type of samples taken:

FW

air temp:

21.6

soil temp (2cm depth):

23.1

End time:

4:15 pm West

Sample storage:

5:30 Central

NOTES: Samples in 60 ml PP syring
placed on wet ice in field

Scale: 1 square = _____

arrived Wintagat 11 pm.

Safety haul job w/ Kancha @ 2:20

Sample West first

R.1 plots pretty much look
the same. All short *Spartina*

R2 set.

a ~~cat~~ little cattail intrusion ~~R2.5~~
R2.1

first set of pins labelled 2.1 are
really 2.5

Dep for Erofms @ 2.1 AC

R3. Set. Invaded by cattails
least in R3.1.
most in R3.5

Much more cattail in this part
of the marsh now

Birds @ Wintagat Lab by 6 pm.
Started filtering samples @ 7 pm.

Scale: 1 square = _____

Rite in the Rain

afternoon
Monday 9/18/2017 Morning

Technician(s): JTB, ABS, CG, Mex

Start Time: ~~4:30~~ 1pm

Sites Sampled: Central Plot

Type of samples taken: Min - max

air temp: 21.5

soil temp (2cm depth): 19.5

End time: 2:30

Sample storage: immediately on dry ice

NOTES:

6 cores per plot.

all 3cm depth.

~~5:45 arrived @ Westlight Lab.~~

Marsh was just barely topped
at 11am. Waited a couple hours
to sample.

all 3 plots show 100% same veg.
Cattails near but not in plots.

Scale: 1 square = _____

Veg @ Central is dominant

3 sided rushes + some shrubs
dark green grass? + some tall shrub,
started w/ Row 1 edged side

took photos of cores

Should we continue

3cm depth cores as 2010-12

sampling?

YES - Carbon layer in R. 1 & 2

Biochar was within top 3cm

Some clear layer, some smudged

6 cores per plot, randomized
across plot.

R1.5 AC

layers very clear & obvious

Bottom of black @ ~3cm

same for 2 & 2

AC layers clearer than Biochar layers

check 5cm pw again w/ sifter -
no real appearance of sulfide

Did 4 pull in different plots -
NO sulfide smell.

Scale: 1 square = _____

Rate in the Rain

Monday 9/18/2017 Afternoon

Technician(s): JTB, ABS, LG, meg S

Start Time: 3:00 pm

Sites Sampled: West plots

Type of samples taken: mini-cores

air temp: 21.8

soil temp (2cm depth): 20.8

End time: 4:30 pm

Sample storage: dry ice in field

NOTES:

Mini cores, 6 per plot
all 0-3 cm depth
Lot of spiro of core sl plots

Cloudy all day

Both Central & West are wetter @ our
sample today than yesterday
But West is much wetter than
Central @ usual.

Surface mud @ West - Scraggy abd
& its very black.

Scale: 1 square = _____

Sipper tests for nasal sulfide,
R.15 & outside - very much
sulfide smell
some in R.2.1

Row 2 -

2.1 has just a few cattail stems
on the outer end.

5 cm pw sulfide for sipper

Row 3 - cattails in cell, & lots
but not very

5 cm pw NOT sulfide @ all plots

10 & 20 pw NOT sulfide in

cattails, some sulfide in
plots w/ just cattails.

Scale: 1 square = _____

Rite in the Rain

Tuesday 9/19/2017 Morning

Technician(s): JBS, ABS (G. M. G.)

Start Time: 7:45 am

Sites Sampled: West

Type of samples taken: 4.8 cm depth cores

air temp: 20.2

soil temp (2cm depth): 19.6

End time: 10:30

Sample storage: cores racks, RT

NOTES:

Site has no standing water
But pretty wet, about the same
as Monday afternoon.
Tyler smells stinky, but those are
deep cores.

Scale: 1 square = _____

Stippen Sample @ R.3.5

cuttail, almost of row

HS by nose @ 5cm

Tyla took most of the cores. Ally
did some in row 1 & 2

Condy & Ally cut cores @ Wintupot
del core 0-7cm
on 1cm intervals.

Cut with saws using

on standard core cutter.

Done in person by 11:30

4 cores per plot.

Each 1cm slice composited in a bag
for all 4 cores

(50 7 bag per plot.)

Top interval is bag 1 (0-1cm)

All cores cut on same intervals.

Scale: 1 square = _____

Rite in the Rain

Tuesday 9/19/2017 Afternoon

Technician(s): JTB, ABS, meg

Start Time: 1:00 pm

Sites Sampled: Central

Type of samples taken: 4.8 cm cores

air temp: 23

soil temp (2cm depth): 20.6

End time: 3:15

Sample storage: cool racks RT

NOTES:

Candy stayed back to cut core

Row 1 & 2 done about 1:45

Scale: 1 square = _____

Sipapo - for nasal sulfide
1.3 5cm - nothing
3.2 10cm - hint
20cm - definite sulfide (just a bit)

2.4 5cm - nothing
10cm - hint
20cm - strong sulfide

Ar 23.0°C

Soil @ ~3cm 20.6°C

Scale: 1 square = _____

Rite in the Rain

Wednesday 9/20/2017 Morning

Technician(s): _____

Start Time: _____

Sites Sampled: _____

Type of samples taken: _____

air temp: _____

soil temp (2cm depth): _____

End time: _____

Sample storage: _____

NOTES: _____

No field work was.

Shipped - mini core & nutrient
samples in a small styrofoam
pushable container w/ dry ice
Carbon black core & liquid Hg samples
shipped w/ a little dry ice

Scale: 1 square = _____

9/22 Coders arrived from
PEREX.

* 1) Small coders w/ minicore & nutrient
samples arrived frozen

* 2) Core slices for carbon black
+ pw Hg samples in a large cooler
Arrived cool but not frozen

all the supply coders arrived today too.

* Note Both of these coders were
shipped FedEx Priority Overnight
w/ dry ice
But FedEx screwed up & sent them
to Memphis on 9/20
We called & arranged delivery today.

Scale: 1 square = _____

Rite in the Rain.