Karen Rauter Stream Program Coordinator

Brenden Wagner Stream Restoration Coordinator

Stacie Howell Catskills Streams Buffer Initiative

Haley Springston Watershed Planning Coordinator RONDOUT NEVERSINK STREAM PROGRAM SULLIVAN COUNTY SOIL & WATER CONSERVATION DISTRICT

> Brian Brustman *SWCD District Manager* Lisa Schick *SWCD Office Manager* Les Kirby *Technician* John Kline *Technician*



Mark Vian **DEP Program Manager**



Next Gen Landowners





History Buffs



HEWITT holds worried trout, extracted from the Neversink River on one of his self-designed flies (see top margin), before restoring him to stream. He can also catch trout by tickling their stomachs under water. July 15, 1946 Life Magazine

Courtesy Catskill Flyfishing Museum



Buffer As Habitat

Flora and Fauna of Catskill Streams





OTO GRAPHY ID ALAN CRESSLER (pink turbineed), DEPOSIT PHOTOS, DREAMSTIME, ISTOCK, ALUSON LENT (fishing spider), SHUTTERSTOCK, WILL PARSON/CHESAPEAKE BAY PROGRAM (crayfish), JERRY A. PAYNE (hag moth), NICHOLAS A. TONELLI/hemiock (noisi), VICKERS AND BEECHER (Hayley, swailowaik, sedge), KETH WILLIAMS (caddistly)



Foodie Interactive





NYS Hemlock Initiative





Expand Recreation Stakeholders









WHO?

- Farmers
- Gardeners
- Orchardists/Vintners
- Work with above?





WHO?

- Farmers
- Gardeners
- Orchardists

- Organic (old news)
- Regenerative
- No Till
- Remineralization
- Soil Food Web
- Permaculture
- Bionutrient
- Korean Natural Farming



WHY?

- Little/no soil
 - Issues with available soil to purchase
 - Issues with on-site soil
- Weeds
- Poor growth
- Replanting
 - Increased labor & expenses



WHY?

- Healthier, bigger plants
 - Stronger Roots
 - Faster Establishment
- Reduce Costs
- More Projects
- Difficult to Access Sites
- Carbon Sequestration
- Large Disturbance/Compaction Footprint of Projects
- Healthier, More Diverse & Resilient Ecosystems
- Less Soluble Fertilizers/Herbicides
- Drought Resistance/Decreased Watering
- Increase Knowledge
- Beyond Sustainability



WHY?

Sustainable

- Marriage
- Status Quo



WHY?

Regenerative

"a system of farming principles and practices that increase biodiversity, enriches soils, improves watersheds, and enhances ecosystem services." -Terra Genesis Inc



WHY?

Regenerative

planting "a system of farming principles and practices that increase biodiversity, enriches soils, improves watersheds, and enhances ecosystem services."



WHERE?

- Any place with soil (or should have soil)
 - % of Project Site
- Hard to access sites
- DEC Forever Wild?









WHAT?

- COMPOST ٠
 - Hot
 - Vermicompost
 - Compost Tea
 - Local
- Soil Mineralization
 - Rock P
 - Azomite •
 - Local Glacial/Basalt Rock
 Local Seed Collection Dusts
 - Targeted Micro-nutrients

- Biochar
- Seed Inoculant
- Cover Crops
 - Multi-Species
 - Multi-Year Soil Growth
- Ramial Chipped Wood
- Humates/Humic Acid
- Foliar Sprays



How?

- Soil Building
 - Loam
 - Sourcing/Testing
 - Compost
 - Inoculation
 - Sourcing
 - Mineralization
 - Minerals
 - Inoculants
 - Biochar

- Seeding
 - Sourcing
 - Carbon
 - Proganics
 - Minerals
 - Rock Dust
 - Targeted Minerals
 - Life
 - Mycorrhizal/ Bacterial
 - Local/Purchased

- Nursery Stock
 - Soil Mix
 - Weight
 - Inoculation
 - Foliar Spray