

KEEPIN' IT COVERED IN THE CAROLINAS

NC Coastal Demonstration – see ncsoilwater.org for Mountain & Piedmont regions!

Controlling soil erosion and weeds infestations are a concern for producers in the Coastal Plain region of North Carolina. Winter cover cropping could help, but what type of cover crop is most suitable? Are mixtures of cover crops beneficial? Could multi-species cover cropping improve soil health?

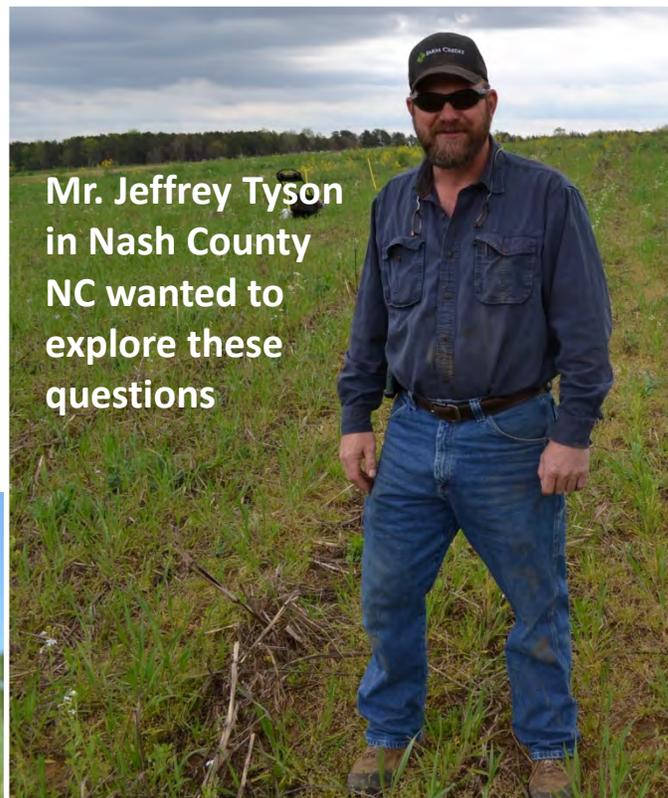
At the end of the soybean growing season in 2015, cover crops were sown:

- broadcast onto green beans on Oct 20
- drilled after harvest on Dec 8
- drilled after harvest on Jan 8

Multi-species cover crop mix in fall 2015:

54 lb/A rye, 15 lb/A Austrian winter pea, 8.5 lb/A crimson clover, 6.5 lb/A tillage radish, 1 lb/A woolypod vetch

Compared with no cover and single-species cover of Abruzzi rye (100 lb/A)



Mr. Jeffrey Tyson in Nash County NC wanted to explore these questions



Cover crop biomass production on April 24, 2016 averaged 974 lb/A when broadcasted, 1086 lb/A when drilled on Dec 8, and 496 lb/A when drilled on Jan 8



Coastal Plain region

Norfolk loamy sand (fine-loamy, kaolinitic, thermic Typic Kandudults)



Multi-species cover crop
1179 lb/A

Cover Crop Biomass
April 3, 2017

No cover crop
580 lb/A

Lessons learned

- Soil properties were not affected by multi-species cover cropping in this on-farm demonstration. Multiple years of evaluation will likely be needed to fully assess changes in soil properties.
- Side-by-side strip trials were useful to make evaluations and to demonstrate the performance of cover crops in a systematic manner.

Multi-species cover crop mix
Fall 2016:

40 lb/A rye, 10 lb/A crimson clover, 2 lb/A daikon radish

