What do Reebok shoes, fuel, and disposable forks have in common?! All can come from biorenewable sources instead of petroleum. This week, undergraduate students and teachers started a new program exploring the potential for plant-based bioproducts.



This Fall marks the official start of the USDA-funded Sustainable Bioproducts and Bioenergy Program (SBBP). Through collaboration between NC State's College of Natural Resources and College of Education, SBBP aims to provide diverse undergraduate students and high school teachers with interdisciplinary knowledge and skills needed to advance the bioeconomy, an economy based on renewable bioproducts produced from plant materials rather than petroleum.

On August 11th and 15th, the program hosted full-day orientations on the NC State campus for nineteen high school teachers from eastern North Carolina and nineteen undergraduate students representing eight different colleges and universities around the state. It was a chance for participants to meet their cohort for the first time, gain details on the program and their commitment to educational research, and be immersed in hands-on lab activities that centered on real-world bioproduct production and applications.

Here is just one way that bioproducts can impact our daily lives and future to come: <u>https://www.cbsnews.com/video/reebok-launches-sustainable-sneaker-made-from-corn/</u>

Visit our website: <u>http://go.ncsu.edu/sbbp</u> Contact us: <u>BioproductsUSDA@ncsu.edu</u>



College of Natural Resources

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SBBP teachers and students met for the first time and connected throughout the day over their shared interest in the bioeconomy.







Dr. Richard Venditti (co-Principal Investigator) and Heather Starkey (graduate teaching assistant) guided participants through a hands-on lab activity focused on de-inking wastepaper through a flotation technique to demonstrate the importance and challenges of recycling.





SBBP participants also investigated the enzymatic digestion of starch by amylase, a process that has important applications in biofuel and bioplastic production, reducing our reliance on fossil fuels.

