Most people like to look at maps. How many times have you looked at a map just to figure out where you’re going, and then become distracted by towns, rivers and mountains off to the side? And in this day and age, maps—including satellite imagery—are all around us, on our phones and in our cars. This past year, Extension faculty at UConn’s Center for Land Use Education and Research (CLEAR) have concentrated on using maps in a new way—and done so well that they’ve won an international award for their efforts.

CLEAR’s Extension faculty has long used maps to educate land use decision makers and the public about Connecticut’s landscape and natural resources. The foundational research and Extension project of CLEAR is called Connecticut’s Changing Landscape (CCL), which uses remotely sensed imagery to measure changes to our landscape over time. Currently, the project covers the 25-year period from 1985 to 2010 (a 2015 update is underway). The landscape is characterized into land cover classes, which denote what the satellite imagery actually sees on the ground; for instance, development, turf, agricultural field, and forest.

The CCL website created by Extension faculty has graphs and data tables, but most of the website is devoted to maps, making them easily accessible and available for the user in a number of formats, from the static to the highly interactive. Recently, though, new technology has upped the ante on the term “highly interactive.” Mapping technology industry leader Esri Corporation has created a web format called “Story Maps.” Story Maps allow the developer to combine interactive map windows with explanatory text, photos, videos, and just about any other type of information that can be put on the web. This has proved ideal for many CLEAR projects, especially CCL. The project’s complex combinations of land cover categories, time intervals, derivatives and different scales (from statewide to town to watershed to local) can be confusing, and a Story Map format allows the creators to, quite literally, tell the story of in what way,
“...the Changing Landscape project has become a valuable resource for the planning and natural resource management sectors of Connecticut...”

how much, and where our landscape is changing. For instance, the image (below) shows a screen capture from the “Turf and Grass” page of the Story Map, showing the map on the left and text and graphics on the right. The map is “live” and interactive and the user can pan, zoom, and click on various features for more information.

Story Maps are a new and constantly evolving format. In 2015, Esri held an international storytelling with maps contest. Emily Wilson, a Geospatial Technology Extension Educator, decided that the CCL Story Map, called Tracking Land Cover Change in Connecticut, was worthy of an entry due to its unique analysis and display of complex CCL data. Helping her to plan the story, including the component videos, photos and graphics, was Extension Water Quality Educator Chet Arnold, who also serves as CLEAR’s Director of Outreach.

The result: Connecticut’s Changing Landscape Story Map was named the Best Science/Technology/Education Story Map in the 2015 Esri Storytelling with Maps contest—one of only four first place winners from over 400 entries from around the globe. The story map was featured at the Esri User Conference, held each year in San Diego, CA and attracting over 16,000 attendees. Emily presented in two sessions, conducted an on-camera interview and received the award directly from Esri President and Founder Jack Dangermond (photo, other side).

Since its inception in 2004, the Changing Landscape project has become a valuable resource for the planning and natural resource management sectors of Connecticut, used in a wide variety of ways by academia, state and local government, and nonprofit organizations. With the addition of the Story Map, which has had thousands of individual viewers in just the past 8 months since it was posted, Extension hopes to bring the story of Connecticut’s Changing Landscape to an even broader audience.

CLEAR Story Maps

Emily and Chet’s success helped to inspire other Extension faculty at CLEAR to create Story Maps for their own projects. Dave Dickson has created one, called the State of Low Impact Development in Connecticut, which describes the results of research done over the summer of 2015 by CLEAR’s NEMO Project on the use of “low impact development” practices in Connecticut towns. The Story Map not only tells a compelling story, but also can be used as a research tool by town planners and others, since the interactive maps provide direct links to various town documents that pertain to low impact development.

Cary Chadwick worked with CAHNR graduate student Mike Evans to create The Bears are Back, a Story Map on his research investigating the growing population and distribution of black bears in Connecticut (photo above, wildlife camera traps were set up at several sites to catch digital photographs of visitors to the site).

Emily has created another Story Map with Extension Educator Joel Stocker, called Explore Connecticut’s Changing Shoreline, which looks at historical changes to Connecticut’s coastline from 1934 to the present by carefully comparing historic and current aerial imagery. CLEAR’s Extension crew are confident that this new technology will help them to bring their research and outreach efforts to an ever-growing audience. View all of the Story Maps at: clear.uconn.edu/storymaps.