

OVERVIEW OF THE 2017 11TH SOUTHERN FORESTRY AND NATURAL RESOURCES GIS CONFERENCE

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ABSTRACT. This is a brief overview of the 11th Southern Forestry and Natural Resources GIS Conference (SOFOR GIS) and associated with it current submissions to this Special Section dedicated to the series of these repeated biannually SOFOR GIS conferences. In the current issue we have in this section two papers from this conference, one Research Summary of a Presentation, and two Research Summaries of Posters.

Keywords: Symposium Proceedings; SOFOR GIS; Geographic Information Systems; Remote Sensing; Spatial In-formation Technologies.

1 BACKGROUND

The idea of having Special Sections in the *Mathematical and Computational Forestry & Natural-Resource Sciences* (MCFNS), for publication of selected peer-reviewed papers from different conferences, was born in 2010 — two years after the inception of the MCFNS journal. It came about as a result of collaboration between different conference organizers and the journal editorial board. Initial suggestion for that collaboration was to run MCFNS special issues dedicated to various conferences; however, the practice at the first attempt of implementation showed that a single issue publication would require serious compromises. Namely, those who were able to have their manuscripts accepted early would be made to wait for publication by those who had their manuscripts accepted later in time, which sometimes translates into a considerable delay in publication time.

The Southern Forestry and Natural Resources GIS Conference (SOFOR GIS) have a long tradition; the University of Georgia (UGA) has been organizing this series of conferences for nearly a quarter century. The history of the conference and its productions can be found in Bettinger and Hubbard (2010) and in Bettinger and Merry (2014).

The 2017 SOFOR GIS conference was held at the Georgia Center for Continuing Education, University of Georgia, Athens, GA 30602 USA, on December 11–12, 2017. It was attended by 130 people from 7 countries (Afghanistan, Canada, Czech Republic, China, Japan, Sweden, USA.) It hosted three Keynote Presentations, 34 Presentations with two Demos, 10 posters, and four

sponsor tables. The conference website is at: soforgis.net/2017/index.html and the conference program can be found at: soforgis.net/2017/files/SOFORGIS_Program_FINAL.pdf.

The conference traditionally had contests for the best grad student: paper, poster, and presentation. Madelyn Anderson won the prize for the best student paper titled: “*An Assessment of Invasive Plants on Shorter University’s Campus*”, and her follow up paper has passed the MCFNS peer-review process and is included in this issue. The winner of the Best student presentation was Devon Gaydos discussing his study on: “*Tangible Geospatial Models as Decision Support Systems for Forest Disease Mitigation*”, but there is not a follow up publication here. Shogufa Popal won the prize for the best poster titled: “*Object-based forest cover change mapping using remote sensing in Nuristan Province, Afghanistan*”, and her Poster Research Summary is included in this Special Section.

2 CONTENTS OF THE SPECIAL SECTION

This Special Section contains two full papers and three Summaries in the form of extended abstracts. The first full paper in this section, Bettinger and Merry (2018), titled “*Follow-Up Study of the Importance of Mapping Technology Knowledge and Skills for Entry-Level Forestry Job Positions, as Deduced from Recent Job Advertisements*”, discusses follow up research on Bettinger et al. (2016). The purpose of this study was to determine the extent to which mapping technology, including geographic information systems (GIS) and global positioning systems (GPS), and skills associated with them

are important for entry level positions in forestry profession.

The second full paper in this section, which passed the MCFNS peer-review process, is the conference winner of the best student paper, Madelyn Anderson, from Mississippi State University, coauthored the paper “An Assessment of Invasive Plants on Shorter University’s Campus” with Crosby (Anderson and Crosby 2018). The paper discusses a study based on random sampling of on-ground plots assessing presence of invasive plants in the studied area.

In addition to the above full papers there are three extended abstracts included in this section: one Presentation Research Summary and two Poster Research Summaries. The Presentation Research Summary included in this section is by Siyu Zhang, visiting scientist from China residing at the time of the conference at the University of Georgia. The presentation was titled: “Geospatial Assessment of Potential American Chestnut (*Castanea Dentata*) Reestablishment”, and it describes research into the significance of different environmental factors and their role in achieving a successful reestablishment of that species.

The first Poster Research Summary is by the winner of the first award in the category of graduate student posters, Shogufa Popal, an Afghan grad student at the University of Tokyo, Japan. The research presented is titled: “Object-Based Forest Cover Change Mapping Using Remote Sensing in Nuristan Province, Afghanistan”, and it describes spatiotemporal analysis of the Landsat imagery with respect to land cover type changes over time and its implication on the area and quality of forested cover types in Afghanistan.

The last extended abstract is from the Poster Research by Shingo Obata, Japanese student at the University of Georgia, who presented a poster titled: “Estimation of Forest Stand Disturbance Through Implementation of Vegetation Change Tracker Algorithm Using Landsat Time Series Stacked Imagery in Coastal Georgia”. This research focuses on time series Landsat image stack analysis for the identification of the historical disturbances in order to estimate the age of current forest populations.

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