

## **Rutherford (Rud) V. Platt**

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### **EDUCATION**

*University of Colorado at Boulder*, Department of Geography, Boulder, Colorado.  
Ph.D., August 2004.

*University of Colorado at Boulder*, Department of Geography, Boulder, Colorado.  
M.A., May 2001.

*Bowdoin College*, Brunswick, Maine.  
A.B., Economics and Environmental Studies, 1996.

### **PROFESSIONAL EMPLOYMENT & AFFILIATIONS**

*Professor*, Department of Environmental Studies. Gettysburg College, Gettysburg, Pennsylvania. 2017-present.

*Visiting Scholar*, CIRES Earth Lab, University of Colorado, Boulder, Colorado, 2022-2023.

*Associate Professor*, Department of Environmental Studies. Gettysburg College, Gettysburg, Pennsylvania. 2010-2017.

*Visiting Scholar*, Harvard Center for Geographic Analysis. Harvard University, Cambridge, Massachusetts. 2015-2016.

*Assistant Professor*, Department of Environmental Studies. Gettysburg College, Gettysburg, Pennsylvania. 2004-2010.

### **PUBLICATIONS**

Platt, Rutherford, T. Chapman, J. Balch. 2024. Fire refugia are robust across Western US forested ecoregions. *Environmental Research Letters*. 19 014044.

Crowley, M.A., Stuhlmacher, M., Trochim, E.D., Van Den Hoek, J., Pasquarella, V.J., Szeto, S.H., Howarth, J.T., Platt, R., Roy, S., Tellman, E., Chakraborty, T.C., Ignatius, A., Cherrington, E., Markert, K., Wu, Q., Madhusudan, M.D., Mayer, T., Cardille, J.A., Erickson, T., Moore, R., Clinton, N.E., and Saah, D.S. 2003. Pillars of Cloud-Based Earth Observation Science Education. *AGU Advances*, 4(4), e2023AV000894. [Selected as an 'Editor's Highlight' by AGU Advances]

Ogra, Monica, U. Manral, R. Platt, R. Badola, L. Butcher\*. 2020. Local perceptions of change in climate and agroecosystems in the Indian Himalayas: A case study of the Kedarnath Wildlife Sanctuary Landscape. *Applied Geography*. 125: 102339.

Platt, Rutherford, M. Ogra, N. Kisak\*, U. Manral, R. Badola. 2020. Climate change perceptions, data, and adaptation in the Garhwal Himalayas of India. *Climate and Development*, DOI: 10.1080/17565529.2020.172406.

Koehler, K., J.H. Ellis, J.A. Casey, D. Manthos, K. Bandee-Roche, R.V. Platt, B.S. Schwartz. 2018. Exposure Assessment Using Secondary Data Sources in Unconventional Natural Gas Development and Health Studies. *Environmental Science & Technology*. 52(10): 6061-6069.

- Edelson, M.\*, S. Monani, R.V. Platt. 2018. Migrant farmworkers' perceptions of pesticide risk exposure in Adams County, Pennsylvania: A cultural risk assessment. *Journal of Agriculture, Food Systems, and Community Development*. 8(1).
- Platt, R.V., D. Manthos, J. Amos. 2018. Estimating the Creation and Removal Date of Fracking Ponds Using Trend Analysis of Landsat Imagery. *Environmental Management*. 61: 310-320.
- Platt, R.V., M.V. Ogra, R. Badola, S.A. Hussain. 2016. Conservation-induced resettlement as a driver of land use change in India: An object-based trend analysis. *Applied Geography*. 69:75-86.
- Platt, R.V. 2014. Wildfire hazard in the home ignition zone: An object-oriented analysis integrating LiDAR and VHR Satellite Imagery. *Applied Geography*. 51: 108-117.
- Sherriff, R.L., R. Platt, T.T. Veblen, T.L. Schoennagel, M.H. Gartner. 2014. Historical, Observed, and Modeled Wildfire Severity in Montane Forests of the Colorado Front Range. *PLOS ONE*. 9(9): e106971.
- Commito, J.A., A.E. Commito, R.V. Platt, B.M. Grube\*, W.E. Dow\*, N.J. Gownaris\*, K.A. Reeves\*, and A.M. Vissicelli\*. 2014. Recruitment facilitation and spatial pattern formation in soft-bottom mussel beds. *Ecosphere*. 5(12): 1-26.
- Walter\*, J.A. and R.V. Platt. 2013. Multi-temporal analysis reveals that predictors of mountain pine beetle infestation change during outbreak cycles. *Forest Ecology and Management*. 302: 308-318.
- Platt, R.V. 2012. Mapping settlements in the wildland urban interface: a decision tree approach. *Professional Geographer*. 64(2): 262-275.
- Platt, R.V., T. Schoennagel, T.T. Veblen, R.L. Sherriff. 2011. Modeling wildfire potential in residential parcels: a case study of the north-central Colorado Front Range. *Landscape and Urban Planning*. 102: 117-126.
- Platt, R.V. 2010. The wildland-urban interface: evaluating the definition effect. *Journal of Forestry*. 108(1): 9-15.
- Platt, R.V. and T. Schoennagel. 2009. An object-oriented approach to assessing changes in tree cover in the Colorado Front Range 1938-1999. *Forest Ecology and Management*. 258: 1342-1349.
- Platt, R.V., T.T. Veblen, R.L. Sherriff. 2008. A spatial model of mechanical thinning location and forest management outcomes in the wildland-urban interface. *Natural Hazards Review*. 9(4): 199-208.
- Platt, R.V. and L.M. Rapoza\*. 2008. An evaluation of an object-oriented paradigm for land use/land cover classification. *Professional Geographer*. 60(1): 87-100.
- Platt, R.V., T.T. Veblen, R.L. Sherriff. 2006. Are wildfire mitigation and restoration of historic forest structure compatible? A Spatial Modeling Assessment. *Annals of the Association of American Geographers*. 93(3): 455-470.
- Platt, R.V. 2006. A model of land use change and wildfire mitigation. *Environment and Planning B: Planning and Design*. 33: 749-765.
- Platt, R.V. and F.H. Goetz. 2004. A Comparison of AVIRIS and landsat for land use classification at the urban fringe. *Photogrammetric Engineering and Remote Sensing*. 70(7): 813-819.

Platt, R.V. 2004. Local and global analysis of fragmentation in a Colorado mountain region. *Agriculture, Ecosystems and Environment*. 101: 207-218.

(\* Indicates student co-author)

### **SELECTED PRESENTATIONS**

Platt, R.V. The cloud-based earth observation paradigm: Implications for education and science. Gettysburg College Friday Forum. October 20<sup>th</sup>, 2023.

Platt, R.V., Characterization of wildfire refugia in western forests using the complete Landsat imagery Archive. Annual Meeting of the American Association of Geographers. Denver, Colorado. March 24<sup>th</sup>, 2023.

Platt, R.V., Trends in wildfire extent, severity, and refugia in Western Forests 1986-2021: An analysis using the complete Landsat imagery Archive. Colloquium Series, Department of Geography, CU Boulder. March 3<sup>rd</sup>, 2023. (Invited Talk).

Platt, R.V., Characterizing fire refugia in western forest ecoregions 1986-2021. Environmental Data Science (EDS) Seminar Series. CIRES Earth Lab, CU Boulder. February 14<sup>th</sup>, 2023. (Invited Talk)

Platt, R.V., M. Ogra, N. Kisak, U. Manral, R. Badola. Climate change perceptions, data, and adaptations in the Kedarnath Wildlife Sanctuary Landscape, India. Annual Meeting of the American Association of Geographers. April, 2022. Virtual.

Hauser, A. and R.V. Platt. 2019. Yellowstone in Transition: An Analysis of the Potential Impacts of Climate Change on Fire Regimes and Post Fire Regeneration of Forested Areas. Annual Meeting of the Association of American Geographers. April, 2019, Washington DC.

Platt, R.V. 2018. Trend analysis of the Enhanced Vegetation Index following the 1988 Summer of Fire in Greater Yellowstone. Annual Meeting of the Association of American Geographers. April, 2018, New Orleans.

Platt, R.V. 2017. Trend analysis of post-fire vegetation greenness in Yellowstone National Park, USA. EARSeL Forest Fires Special Interest Group Workshop. September, 2017, Chania, Greece.

Platt, R.V., D. Manthos, Y. Franklin, and J. Amos. 2016. Detecting the creation and removal of fracking impoundments using trend analysis of Landsat imagery. Annual Meeting of the Association of American Geographers. March 2016, San Francisco.

Platt, R.V., J Bloomquist, and C. Martinez. 2015. Mellon Crazy: Three Paths to Robust Research Experiences for Students. Gettysburg College Friday Faculty Lunch. November 13, 2015.

Platt, R.V. 2015. Remote Sensing of Land Use and Land Cover: from Pixels to Objects and Back Again. Gettysburg College Friday Faculty Lunch. September 25<sup>th</sup>, 2015.

Platt, R.V. and M.V. Ogra. 2015. Object-based trend analysis of land use change within a wildlife corridor in India. EARSeL Workshop: Temporal Analysis of Satellite Images. Stockholm, Sweden. June, 2015.

Platt, R.V. 2015. Geographic object-based image analysis: promise and pitfalls. ABCD GIS Seminar Series. Harvard Center for Geographic Analysis. Cambridge, MA. March 26<sup>th</sup>, 2015. (Invited Talk).

- Platt, R.V., and M.V. Ogra. 2014. Conservation-induced resettlement as a driver of land use change in India: an object-oriented image analysis. Global Land Project 2<sup>nd</sup> Open Science Meeting. Berlin, Germany. March, 2014.
- Platt, R.V., 2013. Assessing wildfire hazard to structures in the wildland-urban interface: a data fusion approach. Annual Meeting of the Association of American Geographers. Los Angeles, CA. April, 2013.
- Platt, R.V., 2011. Does defensible space help structure survival? A case study of the Fourmile Fire. Annual Meeting of the Association of American Geographers. Seattle, WA. April 14<sup>th</sup>, 2011.
- Platt, R.V., 2010. The wildfire risk trajectory of exurban development in the Colorado Front Range. Annual Meeting of the Association of American Geographers. Washington DC. April 14<sup>th</sup>-18<sup>th</sup>, 2010.
- Platt, R.V. and T. Schoennagel 2008. Have forests really become denser? An object-oriented assessment of a key premise in wildfire policy. GEOBIA 2008 – Pixels, Objects, Intelligence: Geographic Object Based Image Analysis for the 21<sup>st</sup> Century. Calgary, Canada. August 6-7, 2008.
- Platt, R.V. and T. Schoennagel 2008. Have forests really become denser? An object-oriented assessment of a key premise in wildfire policy. Annual Meeting of the Association of American Geographers. Boston, MA. April 19<sup>th</sup>, 2008.
- Platt, R.V. 2007. Wildfire policy in the Rocky Mountains, USA: One Case Study, Two GIS Analyses. Mudumali Field Station, Indian Institute of Science, Bangalore. October 16<sup>th</sup>, 2007.
- Platt, R.V. 2007. A GIS model of structure location for wildfire hazard assessment. Annual Meeting of the Association of American Geographers. San Francisco, CA. April 17<sup>th</sup>, 2007.
- Platt, R.V., T.T. Veblen, and R. Sherriff. 2006. Uncertainty in the wildland-urban interface: scenarios of exurban development, climate, and historic fire regimes. Annual Meeting of the Association of American Geographers. Chicago, IL. March 7<sup>th</sup>, 2006.
- Platt, R.V., T.T. Veblen, and R. Sherriff. 2005. Modeling the compatibility of wildfire mitigation and ecological restoration in the wildland-urban interface. Annual Meeting of the Association of American Geographers. Denver, CO, April 7<sup>th</sup>, 2005.
- Platt, R.V., 2003. Global and local analysis of fragmentation in a mountain region of Colorado. Poster Session, Framing Land Use Dynamics International Conference. Utrecht, the Netherlands, April 2003.
- Platt, R.V., 2002. A Comparison of hyperspectral and multispectral imagery for land use mapping. International Institute of Applied Systems Analysis. Laxenburg, Austria, July 2002.
- Platt, R.V., 2001. Models of land use change in Colorado and lessons for MERMAID. MERMAID (Mauritius Environmental Resource Management and Industrial Development) Workshop. Flic-en-Flac, Mauritius, June 2001.

## **FELLOWSHIPS AND GRANTS**

*Characterization of fire refugia in the coterminous United States using the complete Landsat imagery archive.* Gettysburg College Research & Professional Development Grant, Fall 2022.

*Johnson Teaching Grant.* Funds used to support workshop attendance at the Pecora 21& ISRSE 38 Workshops and Symposium, Baltimore, 2019.

*Cloud-based image processing with Google Earth Engine.* Gettysburg College Research & Professional Development Grant, May 2018.

*Johnson Teaching Grant.* Funds to support workshop attendance at the annual meeting of the American Society of Photogrammetry and Remote Sensing, Baltimore, 2017.

*Conservation-Induced Displacement and Deforestation Outside of Rajaji National Park, India.* An Object-Oriented Remote Sensing Analysis. Gettysburg College Research & Professional Development Grant, May 2012.

*Does Defensible Space Help Structure Survival? A Case Study of the Fourmile Fire in Colorado..* Gettysburg College Research & Professional Development Grant, May 2011.

*Johnson Teaching Grant.* Funds to support course development for first year seminar ‘Sustainability or Collapse?’ August 2010

*Collaborative Research: Fire Risk and Ecological Integrity in the Wildland Urban Interface of the Colorado Front Range.* National Science Foundation, Proposal number 0540928. 2006-2009.

*Hewlett Foundation Grant for Student Portfolio Development.* 2007.

*A Temporal-Spatial Assessment of Residential Development in the Wildland-Urban Interface.* Gettysburg College Research & Professional Development Grant, May 2006.

*EPA STAR Fellowship.* U.S. Environmental Protection Agency. 2001-2004.

*International Institute of Applied Systems Analysis (IIASA).* 2002. Young Scientist Summer Program, Laxenburg, Austria. 2002.

## **PROFESSIONAL TRAINING AND WORKSHOPS**

*ESIIIL Innovation Summit.* Environmental Data Science Innovation & Inclusion Lab. Boulder, Colorado. May 23<sup>rd</sup>-25<sup>th</sup>, 2023.

*Earth Engine Education Workshop (by invite).* Google Headquarters, Mountain View, CA. October 7<sup>th</sup>, 2022, October 13<sup>th</sup> 2023.

*Geo For Good Summit.* Google Headquarters, Mountain View, CA. October 4<sup>th</sup>-5<sup>th</sup>, 2022.

*Geo For Good Summit. Virtual.* November 16-19, 2021.

*Technical Session: How No-cost Landsat Data is Reshaping College Level Remote Sensing Courses.* Pecora 21& ISRSE 38 Workshops and Symposium from October 6-9<sup>th</sup>, 2019 in Baltimore, Maryland.

*FAA Part 107 Preparation Course [for UAV pilot license].* August, 2019.

*Google Earth Engine User Summit.* Dublin, Ireland. June 12-14, 2018.

*R Workshops -- Basic R Programming for Data Analysis, Introduction to R Graphics with ggplot2, R Regression Models.* Institute for Quantitative Social Science, Harvard University. February-March 2015.

*Geo for Higher Education Summit.* Mountain View, CA. July 22-24, 2013.

*Data Visualization with R:* National Institute for Technology in Liberal Education. February, 2011.

*Geospatial Statistics Workshop:* National Institute for Technology in Liberal Education. February, 2010.

*Multilevel Modeling: An Introduction.* Annual Meeting of the Association of American Geographers. Boston, MA. April 17<sup>th</sup>, 2008.

*Analyzing Spatial Data with R.* Annual Meeting of the Association of American Geographers. San Francisco, CA. April 17<sup>th</sup>-21<sup>st</sup>, 2007.

*Teaching GIS in Liberal Arts Colleges.* National Institute for Technology and Liberal Education. Saratoga Springs, NY. June 20-21<sup>st</sup>, 2005.

*Professional Development Workshop for Early Career Faculty.* Geography Faculty Development Alliance. Boulder, CO. June 4-11<sup>th</sup>, 2005.

*Building Geodatabases I.* ESRI Training Course. Washington D.C. May 16<sup>th</sup>-18<sup>th</sup>, 2005.

*Advanced Segmentation and Classification with eCognition.* eCognition Training Workshop. Baltimore, MD. March 6<sup>th</sup>, 2005.

*Introduction to Geoprocessing Scripts using Python.* ESRI Training Course. Washington D.C. October 28<sup>th</sup>-29<sup>th</sup> 2004.

*Young Scientist Summer Program.* International Institute of Applied Systems Analysis (IIASA) Laxenburg, Austria. June-August 2002.

*Introduction to Programming ArcObjects with VBA.* Kuhns and Associates. GIS in the Rockies, Denver, CO. October 9<sup>th</sup> 2002.

*Studying Skillful Teaching.* Research for Better Teaching. Wellesley College, MA. July 5-11<sup>th</sup> 1998.

## **SELECTED SERVICE ACTIVITIES**

- Director of GIS lab, 2004-present
- Web liaison for Environmental Studies Department, 2006-present
- Chair of the Educational Technology Committee, 2020-present
- Promotion Advisory Committee, 2021-present
- Data Science Working Group Committee, 2019-2020
- Chair of the Environmental Studies Department, 2012-2018
- Chair of Department Chairs Technology subcommittee 2013-2018
- Chair of the Gettysburg College Sustainability Committee, 2011-2013. 2021-2022
- Johnson Center for Creative Teaching and Learning Advisory Committee, 2010-2012
- Faculty Finance Committee, 2008
- Faculty Council, 2008
- Student Enrollment and Retention Committee (SERC), 2005-2008

## **SELECTED COURSES TAUGHT**

- FYS105 Sustainability or Collapse? Environmental Change and Society
- ES121 Environmental Issues
- ES230 Introduction to GIS
- ES312 Environmental Applications of GIS
- ES363 Remote Sensing of the Environment
- ES400 The Sustainable Campus
- ES400 The Automobile and its Effects on American Culture and Environment

## **ADVISING OF HONORS THESES, INDEPENDENT STUDIES, AND FULL-CREDIT INTERNSHIPS**

- Bailey Ytterdahl '22, ES453 and ES460 Honors Thesis. Evaluating Human Pressure on Protected Areas in East Africa. Bailey received the Millard E. Gladfelter Prize (competitive award to fund undergraduate research).
- Julia Sharapi '22, independent study: Sea level rise and coastal flooding of a barrier island.
- Alyssa Cassini '21, ES450 independent study: Redlining, canopy cover, and impermeable surface in Pennsylvania.
- Alyssa Kaewwilai '20, ES450 independent study: Potential impact of the 2019 Australia Bushfires on National Parks, Indigenous Lands, and Endangered Species.
- Max Butcher '19, ES453 and ES460 honors thesis: Blue Sky Olympics: Satellite Observations of Emissions Control During the 2008 Beijing Olympics.
- Anna Hauser '19, ES453 and ES460 honors thesis: Yellowstone in Transition: An Analysis of the Potential Impacts of Climate Change on Fire Regimes and Post Fire Regeneration of Lodgepole Pine Forests.
- Natalie Kisak '19, ES450 independent study: Comparing Climate Perceptions and Reality in the Kedarnath Wildlife Sanctuary Landscape, India.
- Charlie Clarke '19, ES473 internship at Moldamatic, LLC and research paper on custom injection molding & the environment.
- Laura Duquette '18, ES473 internship at PA Office of Attorney General and research paper on environmental enforcement.
- Caitlin Rasche '18, ES473 internship at Annapolis Maritime Museum and research paper on non-traditional environmental education.
- Alec Cottone '18, ES473 internship at Pennsylvania Environmental Council and research paper on illegal dump sites.

- Harrold Thoman '18, internship at Strawberry Hill Nature Preserve and GIS project on emergency evacuation planning (not for credit).
- Kelly Collins '16, ES453 and ES460 honors thesis: Effects of Hydraulic Fracturing Infrastructure on Viewshed, Soundshed, and Land Cover in Pennsylvania
- Katherine Cavanaugh '16, ES453 and ES460 honors thesis: Forest Treatments, Wildfire, Pine Beetles, and Development: Trend analysis of Forest Disturbance on the Colorado Front Range
- Micaela Edelson '17, Sam Donnelly '17, Caitlin Rasche '17 – research assistants for Platt *et al.* 2018
- Nick Ferreri '14, independent study project on the use of GIS in Adams County planning.
- Ethan Dively '14, independent study: Conservation-Based Displacement and Forest Resource Use Outside of Rajaji National Park, India.
- Matthew Toich '12 and Julie Ivers '12, research assistants for Platt 2014
- Jon Walter '10, honors thesis: Detection and Modeling of Mountain Pine Beetle Red Attack in Colorado, 2003-2009
- Danielle Bates '10, research assistant for Platt and Schoennagel 2009.
- Matthew Heiser '09, research assistant for Platt 2010
- Andy Padilla '08, independent study: Remote Sensing of Mongolian Archeological Structures
- Matthew Shank '08 research assistant for Platt 2010.
- Andrew Rohrbaugh '07, honors thesis: An Analysis of Land Use Change in the Mid-Atlantic states from 1992-2002
- Lauren Rapoza '06, research assistant and co-author for Platt and Rapoza 2008.
- Jennie Fiorito '06, honors thesis: Conservation Potential and Land Use Fragmentation in Maryland.
- Sarah Lilley '06, honors thesis: A Comparison of Road Data Sources for Assessing Fragmentation in an Agricultural Landscape.

#### **PROFESSIONAL ASSOCIATIONS**

- Association of American Geographers
- Association for Environmental Studies and Sciences
- American Society for Photogrammetry & Remote Sensing