

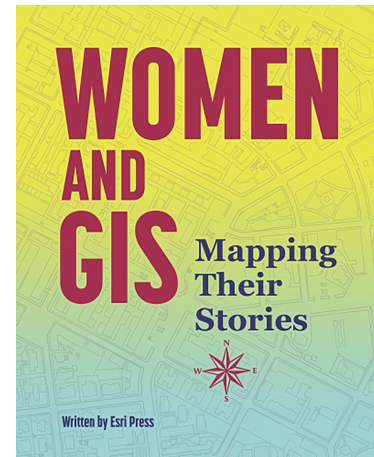
As stated in its foreword, the release of *Women and GIS: Mapping Their Stories* could not come at a better time, a time when women are making their voices heard and taking leadership in exciting new ways. The book showcases the achievements and personal life stories of twenty-three remarkable women who have each changed the world for the better and have used the tools of GIS to help them achieve their goals.

The manager and publisher from ESRI Press who compiled the book, Catherine Ortiz, was impacted by her own mother and grandmother, who knew the value of math and science, and who inspired her to pursue her studies in GIS. In turn, Catherine's own desire to motivate her daughter and other young women to pursue math and science fields led to the creation of this book. The result is a collection of stories of women from all over the world with amazing accounts of personal obstacles, unique perspectives, and perseverance.

There are several common threads that run through the life stories of *Women and GIS*; among them, a love of nature, commitment to the environment, and dedication to improving the lives of our world's displaced, marginalized and vulnerable. The stories present women who dared to become leaders in their field and who were aware of the power of collaboration and team building to accomplish their dreams. Wangari Maathai, Noble Peace Prize recipient, used the power of collaboration to start the Green Belt Movement in her home country of Kenya, which promoted both the sustainable use of natural resources as well as the fight for democracy. Karen E. Firehock started with a passion for playing and working outdoors and built her career around that passion, becoming an environmental planner addressing the problems in stream, river, and wetland habitats. Karen says of her collaborative work for clean water in Africa, "I had to become a part of their world first, listen, and make a difference where I could". Similarly, Kass Green, a businesswoman who founded and managed several successful technology companies using GIS and imagery, advises young women to "find solid team members to work with in your career, and continually encourage their and your intellectual growth. Then listen, listen, listen."

The book highlights women of all ages. Madison Vorva, age 23, was inspired when she was in the second grade by Jane Goodall's work with Chimpanzees. From the age of six, Madison took a leading role in conservation activism and she has since joined Jane Goodall's Institute to promote GIS within the Tapestry of Hope program. Sylvia A. Earle, age 83, was the first person to walk solo on the ocean floor; she became a NOAA Chief Scientist, and was named Time Magazine's First Hero for the Planet."

Many of these women benefited from family, mentors and teachers who spurred them to self-assurance in the face of discouragement and failures. In the story of Paulette Brown-Hinds, recognizing Paulette's disappointment in failing to



Women and GIS: Mapping Their Stories

Catherine Ortiz, Esri Press

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land a job, her mentor stated "I don't know how to get you to see yourself the way that I see you." Shoreh Elhami grew up in Tehran and experienced challenges in obtaining her education during the Iranian Revolution and the Iran-Iraq war as well as hardships when relocating to the United States with a young family; however, the importance of life-long learning and exploration was strongly instilled in her by her mother and father and she went on to a life of mentoring female students and colleagues. In order to be taken seriously, Nancy La Vigne decided to pursue a PhD in criminal justice and found her best mentors were those she proactively sought out, people she admired and wanted to emulate. Mary Spence, a cartographer in Scotland who was honored by the Queen of England with Membership of the Order of the British Empire, was inspired as a child by a geography teacher who would load his students into his dilapidated car and explore cliffs and beaches, sharing stories of history to highlight the geography and provoke their imaginations.

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In reading these stories, one senses the joy that comes from living a self-directed, value-driven life. In the words of Molly Burhans, founder of GoodLands, an organization that manages the conservation and land use of the Catholic Church's landholdings, "It is immensely fulfilling and enjoyable if you can align your career and life in such a way that you are surrounded by people who love what they do, and the best way to achieve that is to do what you love." She also says, "Never stop being in wonder of your work." The motto of Dr. Catherine Ball, leader of the World of Drones Congress and the founder of five start-up companies is, "She who dares, learns," and she states, "I am now more fearless than ever before."

This book includes many calls to action for its readers. In the words of Sylvia A. Earle, "We have the power to change the world – the way we look at the world, the way the world goes forward henceforth- if we just use the technologies and join together with our minds and our hearts and our commitment to make a difference." Shoreh Elhami implores, "We need to educate women about gender equality and their rights, and elect lawmakers who fight for them." Kristen Kurland, Carnegie Mellon University Professor, advises, "It's clear that the cost of higher education will soon exceed an amount that many can afford. Colleges and universities will need to reinvent how they educate students while still upholding academic rigor through research and scholarship." Kathryn Sullivan, the first woman to walk in space, expresses her hopes for the future by saying, "Our world needs more, not fewer, bright and energetic people to become scientists, both to advance the frontiers of knowledge and to connect science to society."

This book has achieved the goals established by its manager and publisher, Catherine Ortiz, to highlight the importance of science, technology, engineering and math (STEM) to change our world for the better and to underscore the key role that women have played and will continue to play in the application of STEM to our world's challenges.

Women who are searching for a path to realize their potential and to make a difference in the world will find inspiration and guidance from the words of wisdom and the life examples provided in this book.

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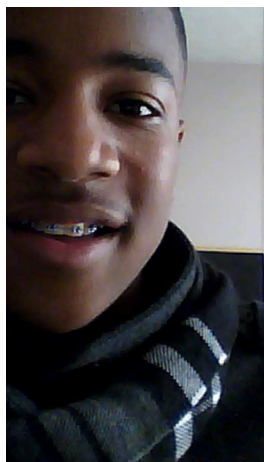
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Pontus Olofsson has a background in geography and mathematics, with a PhD in physical geography from Lund University, Sweden. He is currently a research associate professor and lecturer in the Department of Earth & Environment at Boston University, and a consultant to the World Bank. Olofsson serves on the science teams of the NASA Carbon Monitoring System, the NASA Land Cover and Land Use Change program, and NASA SERVIR. He has been supporting SilvaCarbon's capacity building efforts for almost a decade.



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