

ARIKA VIRAPONGSE, M.S., Ph.D.

1750 30th St, #324, Boulder, CO 80301 ♦ av@middlepatheco.com ♦ www.middlepatheco.com
www.linkedin.com/in/arikavirapongse/ ♦ www.researchgate.net/profile/Arika-Virapongse

EDUCATION

2013 Ph.D. Interdisciplinary Ecology, School of Natural Resources & Environment, U. of Florida

2006 M.S. Pharmaceutical Chemistry & Natural Products, Khon Kaen University, Thailand

2000 B.S. Zoology, University of Florida, USA

2000 B.S. Interdisciplinary Studies—Biological Illustration, U. of Florida, USA- *summa cum laude*

SUMMARY OF QUALIFICATIONS

CONSULTANT & RESEARCHER

Community Engagement consulting focuses on the strategic development of communities for organizations and businesses. I work with online, place-based, and hybrid communities; communities can be both internal (e.g., membership) or external (e.g., audience) to an organization. My community development approach emphasizes social equity, community empowerment, and the cultivation of community leaders. Other consulting services have included program evaluation; social science design in biophysical & environmental science; training in human-dimensions of natural resources and environment; and research on topics ranging from land and natural resource use to earth science data to health.

Social-ecological research activities have included field-based research in Southeast Asia and Central/South America; publication of 20 peer-reviewed articles and 5 edited manuscripts; winning competitive research funding (over \$400,000); curriculum development and teaching on socioeconomics, environmental policy, and social-ecology; 11 invited speaker/panelist presentations; 16 academic conference presentations; and 5 workshops as an invited SME. I have also been an invited reviewer of competitive funding proposals and peer-reviewed journal submissions.

In addition, I have held leadership positions at the Ronin Institute, Community Resilience cluster at Earth Science Information Partners, Society for Economic Botany, IGERT Fellowship program, and working groups; and co-organizing conferences, plenary/sessions, and workshops.

Employment:

2017-present **Principal Consultant and Founder**, Middle Path EcoSolutions, LLC

2020-2023 **Community Director and Human Subjects Research Chair**, Ronin Institute for Independent Scholarship, Remote position
Community builder and manager of 360+ globally-based scholars. Co-lead of strategic development, operations, and Sponsored Research Office (grants administration).

2015 **Research Scientist**, Center for Resilient Communities, U. of Idaho, Moscow, ID
Theoretical development of social-ecological observatories; developing a social-ecological systems training program; writing synthesis papers

- 2014 **Associate Scientist**, National Ecological Observatory Network (NEON) Inc., Boulder, CO
Building institutional collaborations; connecting with underserved communities; enhancing the social-ecological aspect of monitoring
- 2013 **Resident Lecturer**, The School for Field Studies, Bocas del Toro, Panama
Curriculum development, teaching, and supervising undergraduate research (Jan-May)
- 2012 **Research Assistant**, Center for Latin American Studies, University of Florida, USA
- 1999 **Research Assistant**, Department of Zoology, University of Florida, USA

Highlighted consulting projects/roles:

- **Community Engagement consultant**, University of Northern Colorado (UNCO)(June 2023-May 2026): A U.S. National Science Foundation funded project “[Building a Community Learning Ecosystem](#)”. Objective of the project is to bridge and connect UNCO university faculty, students, and the broader Greeley, CO community around climate action goals.
- **Community Engagement consultant**, OPeNDAP (April 2023-Feb 2023): This open source science software organization is funded solely by NASA. I developed the community engagement approach, led rebranding of the organization and website development, and led the hiring and onboarding of a new Community Director for the organization
- **Program Evaluator, Researcher, Webinar series lead**, Earth Science Information Partners (ESIP) (2018-2019): Conducted a program evaluation of ESIP as an organization; conducted semi-structured interviews and information synthesis (blog posts) around the theme of “Making Data Matter”; led the writing of a peer-reviewed research paper on the socioeconomic value of Earth Science data; and led a webinar series to highlight the organization’s strategic commitment to “realizing the socioeconomic value of earth science data”.
- **Research consultant**, Center for International Forestry Research (CIFOR), Bogor, Indonesia (2013-2017): Co-developed the SE Asian regional-level project design during a workshop with ~15 other consultants; conducted stakeholder semi-structured interviews in Northern Thailand; analyzed and synthesized data and literature review; and completed a 120-page report on smallholder forest use and management of sloping lands that was the basis for a peer-reviewed paper.
- **Research consultant**, Wildlife Conservation Society (WCS), Manaus, Brazil (2013 & 2014): Co-developed and taught annual summer field course, “Monitoring Protected Areas from Socioeconomic and Biodiversity Perspectives,” for Amazonian protected area managers

Honorary roles (volunteer/unpaid):

- **Research Scholar** (2016-present), Ronin Institute for Independent Scholarship
- **Courtesy Faculty** (2014-2023), Tropical Conservation & Development program, Center for Latin American Studies, University of Florida, USA
- **Founding Chair** (2018-2021) & **Co-chair** (2021-present), Community Resilience cluster, Earth Science Information Partners (ESIP)
- **Board member**: Park East Square Homeowners Association, Boulder, CO (2021)
- **Research associate, USAID linkage program**, World Agroforestry Center-Brazil & U. of Florida-USA. Conference, workshop, and research on forest value chains; Belem, Brazil. (2010)
- **Council member, student chair**, Society for Economic Botany (2005-09)

HIGHLIGHTED FELLOWSHIPS, GRANTS, AND AWARDS

- **US National Science Foundation**, Project: “Planning Grant: Building a Community Learning Ecosystem For Climate Change Resilience in Northern Colorado”, Funding program: “Cultural Transformation in the Geoscience Community”, Role: Senior Personnel, 2022-25 (\$295,964)
- **FTX Future Fund award**, Coalition of New Academia Institutes, Role: Collaborator, 2022 (\$5,000)
- **Policy development**: [Day One Project](#) policy accelerator fellow, 6-week program, 2021-2022 (\$3000)
- **Research Data Alliance (RDA) Data Share Fellowship**, 2016-17 (\$5,000)
- **Mountain Social Ecological Observatory Network**, working group, U. Idaho, 2014 (\$15,000)
- **Botany in Action**, Fellowship, Phipps Conservatory, PA, 2004-12 (\$21,500)
- **US National Science Foundation-Doctoral Dissertation Research Improvement Grant (NSF-DDRIG)**, Decision, Risk and Management Sciences, 2010-11 (\$14,978)
- **US National Science Foundation-Integrative Graduate Education and Research Traineeship (NSF-IGERT)**, Working Forests in the Tropics program, 2007-11 (\$84,000)
- **Fulbright Scholarship**, Thailand, 2001-03, Study on homegardens and ethnobotany (\$14,000)
- **Florida Bright Future’s Scholarship**, USA. 1996-2000. Full undergraduate scholarship

PROFESSIONAL TRAINING & LANGUAGE

2022 **Social, Behavioral, & Education modules**, Human Subjects Research Training, CITI (exp. 2024)

2014 **Project Management Professional (PMP)**, Project Management Institute, License #1776960

2014 **Sustainable Community Develop.–Political Empowerment**, Village Earth, Fort Collins, CO

2014 **Authentic Leadership**, Naropa University, Boulder, CO

2014 **Santa Fe Science Writing Workshop** – Science Communication & Journalism, Santa Fe, NM

2013 **Tropical Conservation and Development**, University of Florida, Gainesville, FL

2007 **Forest Mgmt Decision-making for Reduced Impact**, Tropical Forest Institute, Belem, Brazil

Languages: Portuguese (intermediate), Thai (intermediate), Spanish (conversational), English (native)

PROFESSIONAL MEMBERSHIPS

- Alliance for Nonprofit Management
- American Evaluation Association
- Consultants for Good (since 2020)
- Colorado Evaluation Network (since 2017)
- Project Management Institute (since 2014)
- Elected member of Golden Key National Honor Society (since 2000)

CO-ORGANIZED SESSIONS/CONFERENCES/BOOTHS

2023. J. Gallagher, **A. Virapongse**, and D. Fulker. OPeNDAP booth in the exhibition hall. AGU annual meeting, San Francisco, CA, Dec 11-15.

2023. J. Gallagher and **A. Virapongse** How to use OPeNDAP to access data: A data users' workshop. Organized session at ESIP Summer meeting, Burlington, VT, July 18-21.
2023. Virapongse A., J. Gallagher, B. Tikoff. "What's next: Project-based sustainability for Earth Science data infrastructure. Organized session at EarthCube workshop. ~35 participants. <https://isi-usc-edu.github.io/building-upon-the-earthcube-community/program>
2021. "Seeking Solutions: Improving the Application of Earth Science Data for Community Resilience". ESIP meeting, Virtual, Jan 26
2019. "20 Years of Making Data Matter", ESIP meeting, Bethesda, MD, Jan 16.
2019. Session, "Community Resilience for earth science data institutions and place-based communities", ESIP meeting, Bethesda, MD, Jan 15 (2019)
2018. "Place-based community resilience: The socioeconomic value of Earth Science data", ESIP meeting, Bethesda, MD.
2016. "Informatics in Social-Environmental Systems, ESIP winter meeting
2015. Plenary and session on Data and Community Resilience, ESIP summer meeting
2014. Workshop on Social-Ecological Observatories, Tropical Conservation & Development program, U. Florida, Gainesville, FL
2010. Annual meeting of Tropical Conservation & Development, U. Florida, Gainesville, FL Conference on
2008. Working Forests in Tropics, U. Florida, Gainesville, FL
2006. Annual meeting of Society for Economic Botany, Chiang Mai, Thailand (2006)

PUBLICATIONS

PEER-REVIEWED ARTICLES

- 2024 **A. Virapongse**, J. Gallagher, B. Tikoff. Insights on sustainability of Earth Science data infrastructure projects. Data Science Journal.
- 2023 Rodrigues Vieira, I, M. Rikelly Frota Aguiar, L. Henrique Machado Amarante, M. Bruno Alves Sales, **A. Virapongse**, J. Soares de Oliveira. Perception of riverside folk about environmental degradation in the Igarapu river, Piauí, Brazil. Sociedade e Natureza. <https://seer.ufu.br/index.php/sociedadennatureza/article/view/67765>
- 2022 **A. Virapongse**, R. Gupta, Z. Robbins, J. Blythe, R. Duerr, C. Gregg. How Can Earth Scientists Contribute to Community Resilience? Challenges and Recommendations. Frontiers in Climate. <https://www.frontiersin.org/articles/10.3389/fclim.2022.761499/full>
- 2020 **A. Virapongse**, F. Pearlman, J. Pearlman, M. Murambadoro, Y. Kuwayama, M. Glasscoe. Ten simple rules to increase the societal value of Earth Observations. Earth Science Informatics.13(2), 233-247 <https://doi.org/10.1007/s12145-020-00453-w>
- 2019 McWethy, D., T. Schoennagel, P. Higuera, M. Krawchuk, B. Harvey, L. Metcalf, C. Schultz, C. Miller, A. Metcalf, B. Buma, **A. Virapongse**, J.C. Kulig, R.C. Stedman Z. Ratajczak, C.R. Nelson, and C. Kolden. Rethinking resilience to wildfire. Nature Sustainability. <https://doi.org/10.1038/s41893-019-0353-8>
- 2019 Stocks, K.I., S. Schramski, **A. Virapongse**, L Kempler. Geoscientists' Perspectives on Cyberinfrastructure Needs: a Collection of User Scenarios. Data Science Journal. <https://doi.org/10.5334/dsj-2019-021>
- 2019 Higuera P, A. Metcalf, C. Miller, B. Buma, D. McWethy, E. Metcalf, Z. Ratajczak, C. Nelson, B. Chaffin, R. Stedman, S. McCaffrey, T. Schoennagel, B. Harvey, S. Hood, C. Schultz, A. Black, J. Taggerty, R. Keane, M. Krawchuk, J. Kulig, R. Rafferty, **A Virapongse**. Integrating subjective and objective dimensions of resilience in fire-prone landscapes. Bioscience 69 (5): 379-388, <https://doi.org/10.1093/biosci/biz030>

- 2018 **Virapongse, A.**, R.E. Duerr, E.C. Metcalf. Knowledge Mobilization For Community Resilience: Perspectives From Data, Informatics, And Information Science. *Sustainability Science*. <https://doi.org/10.1007/s11625-018-0612-z>
- 2018 Lancaster AK, Thessen AE, **Virapongse A**. A new paradigm for the scientific enterprise: nurturing the ecosystem. [version 1; referees: 2 approved, 1 approved with reservations]. *F1000Research* 2018, 7:803 (doi: [10.12688/f1000research.15078.1](https://doi.org/10.12688/f1000research.15078.1))
- 2018 Bourgeron, P., A. Kliskey, L. Alessa, H. Loesch, K. Krauze, **A. Virapongse**, D. Griffith. [Understanding large-scale, complex, human-environmental processes: a framework for social-ecological observatories](#). *Frontiers in Ecology and the Environment*. 16(S1):S52-S66.
- 2017 **Virapongse, A.** [Smallholders and forest landscape restoration in upland northern Thailand](#). *International Forestry Review* 19(S4): 102-119.
- 2017 Eitzel, M.E., J.L. Cappadonna, C. Santos-Land, R.E. Duerr, **A. Virapongse**, S.E. West, C. C. Maximillian Kyba, A. Bowser, C. B. Cooper, A. Sforzi, A. Nova Metcalfe, E. S Harris, M. Thiel, M. Haklay, L. Ponciano, J. Roche, L. Ceccaroni, F. M. Shilling, D. Dörler, F. Heigl, T. Kiessling, B. Y. Davis, and Q. Jiang. [Citizen Science Terminology Matters: Exploring Key Terms](#). *Citizen Science: Theory and Practice*, 2(1): 1, pp. 1–20, <https://doi.org/10.5334/cstp.96>.
- 2017 **Virapongse, A.**, B. Endress, M. Gilmore, C. Horn, and C. Romulo. [Ecology, livelihoods, and management of the Mauritia flexuosa palm in South America](#). *Journal of Global Ecology and Conservation* 10:70-92.
- 2017 **Virapongse, A.** [Social mechanisms for livelihood resilience: A case study of buriti \(Mauritia flexuosa\) in Brazil](#). *Human Ecology* 45(1), 119-129. <https://doi.org/10.1007/s10745-016-9887-9>
- 2016 **Virapongse, A.**, S. Brooks, E.C. Metcalf, M. Zedalis, J. Gosz, A. Kliskey, and L. Alessa, [A social ecological systems science approach to environmental management](#). *Journal of Environmental Management* 178: 83-91. DOI: 10.1016/j.jenvman.2016.02.028.
- 2016 Altaweel, M., **A. Virapongse A.**, D. Griffith, L. Alessa, & A. Kliskey. [A typology for complex social-ecological systems in mountain communities](#). *Sustainability: Science, Practice, & Policy* 11(2) Published online Feb 06, 2016. <http://archives/vol11iss2/1501-001.altaweel.html>
- 2014 **Virapongse, A.**, M. Schmink, and S. Larkin. [Value chain dynamics of an emerging palm fiber handicraft market in Maranhão, Brazil](#). *Forest, Trees, and Livelihoods* 23(1-2). DOI: 10.1080/14728028.2013.868707
- 2009 Duchelle, A., K. Biedenweg, C. Lucas, **A. Virapongse**, J. Radachowsky, D. Wojcik, M. Londres, W.L. Bartels, D. Alvira, and K. Kainer. [Graduate students and knowledge exchange with local stakeholders: possibilities and preparation](#). *Biotropica* 41(5): 578–585. DOI: 10.1111/j.1744-7429.2009.00563.x
- 2005 **Virapongse A** and Picheansoonthon C. [Researching traditional medicine: A review and evaluation of methodology and objectives](#). *The Journal of the Royal Institute of Thailand* 30(4) Oct-Dec: 958-967.
- 2004 **Virapongse A**, Luecha P, Picheansoonthon C. [Recent advances in quantitative ethnobotanical research](#). *Journal of the Royal Institute of Thailand* 29:1032-45.

EDITED PUBLICATIONS

- 2022 **Virapongse, A.** Broadening the Knowledge Economy with Independent Scholarship. A policy brief, edited by the Day One Project. (published via [Day One Project](#) and the [Center for Progress](#))
- 2013 **Virapongse, A.** [Forest products for subsistence and markets: Livelihood systems and value chains of buriti \(Mauritia flexuosa\) in Brazil](#). Dissertation, University of Florida, Gainesville.
- 2006 **Virapongse, A.** [Materia medica of Kui traditional healers \(NE Thailand\)](#). Master's thesis, Khon Kaen University. Khon Kaen, Thailand.
- 2006 **Virapongse A.** Ethnomedicine of the Kui. In: Local wisdom in the Mekong Region: Traditional Healing Wisdom of the Ethnic groups of Isaan. Center for Research on Plurality in the Mekong Region, ed. Khon Kaen: Faculty of Humanities and Social Sciences, Khon Kaen University, Thailand. (Written in Thai and English)
- 2006 **Virapongse A.** Kui traditional healers and conservation of natural resources in Northeast Thailand. *Phipps magazine* autumn/winter issue 2006: 10-11.

TECHNICAL REPORTS

- 2023 Hass B., **A. Virapongse**, Y. Rao, D. Fuka (2023) Breakout session recommendations. In Khider, Deborah; Mike Daniels; Jarboe, Nick. Building Upon the EarthCube Community: a geoscience and cyberinfrastructure workshop - Report. figshare. Conference contribution. <https://doi.org/10.6084/m9.figshare.23949168.v2>
- 2022 **Virapongse, A.**; J. Gallagher; B. Tikoff; P. Cornillon; R. Koskela; S. Shingledecker; C. Trabant; B. Hanson. Sustainability models for integrated digital Earth Science. In EarthCube Organization Materials. UC San Diego Library Digital Collections. <https://doi.org/10.6075/J0JH3MBN>
- 2016 **Virapongse, A.**, L. Powers, and S. Scott. EarthCube/ESIP Research Software Quality Assessment Workshop. Final report for EarthCube, National Science Foundation: 10p.
- 2014 **Virapongse, A.** Thailand profile: Smallholder forest use and management of sloping lands. SLANT report, CIFOR, Bogor, Indonesia: CIFOR: 120 p.
- 2003 **Virapongse A.** A Homegarden Survey in Huai Yang Tong Village, Petchabun Province, Thailand. Final report for Thailand-United States Education Foundation, Bangkok, Thailand.

EXTENSION, OUTREACH, and TOOLS

- 2019 Bishop, B.W., Ungvari, J., Davis, R.I., Lee, T., Goudeseune, L, **Virapongse, A.**, Samors, R.J. (2019) Belmont Forum Data Management Plan Scorecard. doi.org/10.5281/zenodo.3530933
- 2013 **Virapongse, A.** [Produtos florestais para subsistência e mercados: sistemas de meio de vida e cadeias de valores para buriti \(*Mauritia flexuosa*\) em Barreirinhas, Maranhão, Brasil](#). Summary of doctoral research results in Portuguese.
- 2013 **Virapongse, A.** [A árvore da vida: O buriti em Barreirinhas-MA](#). Poster for community of study.

BOOK REVIEWS

- 2013 **Virapongse A.** Book review of Local Commons and Demographic Environmental Governance. Economic Botany 67 (4): 396.
- 2008 **Virapongse A.** Book review of Aboriginal People and their plants. Economic Botany 62 (4): 631.

DATA SETS

- 2019 Stocks, K.I., S. Schramski, **A. Virapongse**, L Kempler. EarthCube User Scenario Collection. UC San Diego Library Digital Collections. <https://doi.org/10.6075/J0WQ024C>

PRESENTATIONS

INVITED SPEAKER / PANELIST / MODERATOR

- 2024 **Virapongse, A.** Build it and they will come?:Community Engagement for Earth Science data initiatives. Invited speaker. CISL NCAR, Boulder CO (Jan 25), slide deck: <https://doi.org/10.6084/m9.figshare.25062620.v1>
- 2023 **Virapongse, A.** Community Engagement for Citizen Science. Invited speaker. Open Geospatial Consortium 126th Member Meeting, Huntsville, AL, June 5-9, 2023 (June 5). slide deck: <https://doi.org/10.6084/m9.figshare.25062731.v1> [Presentation slide deck](#).
- 2022 **Virapongse A.** “Bringing Community into Data Preservation and Environmental Equity”. Oral presentation, [2022 AASG/USGS Data Preservation Workshop](#), August 30–September 1, Butte, Montana (Aug 31)
- 2022 Gallagher J, Tikoff B, **Virapongse A.** A report on the Project Sustainability effort in EarthCube, oral presentation, Session on “[EarthCube Success and Sustainability](#)”, 2022 EarthCube Annual Meeting, June 14-16, San Diego, CA (June 15).
- 2022 **A. Virapongse.** Invited panelist in session on Degrowing Science. Conference on: Bridges between disciplines: gender in STEM and social sciences. Gandía – Valencia, Spain (hybrid) · September 12th-16th, 2022 (Sep 16) <https://bridges2022.com/>

- 2022 **A. Virapongse**. Bringing Community into Data Preservation and Environmental Equity. AASG/USGS Data Preservation Workshop, Butte, MT, Aug 30-Sep 1, 2022 (Aug 31) <https://mbmg.mtech.edu/about/events/workshops/2022Workshop.asp>
- 2021 **Virapongse, A.** Bridging Earth Science data and Community Resilience, Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) 2021 Session "Data Science in Geospace" (June 24).
- 2021 **Virapongse, A.** "Making Science Actionable: Tips for Improving the Societal Value of Earth Observations". Invited panelist in the session on [Harvesting Earth Satellite Data for Societal Benefit](#) in the track Earth Observation for Global Good. Ascendx Summit (Oct 21)
- 2019 **Virapongse, A.** The Fourth National Climate Assessment: Translating Data to Inform Decisions [Moderator]. In the Earth Science Information Partners webinar series, "Data in Action" (May 17). Invited moderator, <https://www.youtube.com/watch?v=ZewBxBKfjOs>
- 2019 **Virapongse, A.** Meaningful Metrics [Invited Panelist]. Boulder Start-up Week (May 13). <https://boulderstartupweek2019.sched.com/event/NNZB/meaningful-metrics>
- 2009 **Virapongse, A.** Linking practice, use and management of medicinal plants among Kui traditional healers of NE Thailand. Invited speaker, Ethnobotany in the Mekong series, U. Hawaii (Apr. 22)
- 2007 **Virapongse, A.** Medicinal plant use by Kui healers. Invited speaker, Phipps Conserv., Pittsburg, PA. (Oct 13).
- 2006 **Virapongse, A.** Learning from healers (Northeast Thailand): The use and collection of local plants for healing, Invited speaker, Phipps Conservatory, Pittsburg, PA. (Jan 7).

ORAL PRESENTATIONS

- 2023 Fulker DW, **A. Virapongse**, JH Gallagher. Cyber technology is not enough: Social structures to foster data-rich, discipline-liminal discourse among humans and machines. Oral presentation (IN22A-03), AGU, San Francisco (Tuesday, Dec 12, 10:40-10:50 AM PT). <https://agu.confex.com/agu/fm23/meetingapp.cgi/Paper/1299674>
- 2023 S. Modekurty, **A. Virapongse**, R.Gupta, Z. Robbins, J. Blythe, R.E. Duerr (2023). Oral presentation in the session on "Opening doors to climate preparedness in small communities" ESIP Summer meeting, Burlington, VT, July 18.
- 2023 **A. Virapongse**, J. Gallagher, B. Tikoff (2023) A study on: Project-based Sustainability for Earth Science data infrastructure. Oral presentation in the Session on "Sustainability of Data Repositories and Networks: When Federal Funds Run Dry", ESIP Summer meeting, Burlington, VT, July 18.
- 2023 S. Modekurty, **Virapongse, A.**, Gupta, R., Robbins, Z. J., Blythe, J., and Duerr, R. E. 2023. Next Steps for Earth Science Contributions to Community Resilience, EGU General Assembly 2023, Vienna, Austria, Apr 24–28, 2023, EGU23-17453.
- 2022 A. Lancaster and **A. Virapongse**. "Making Change happen at the Ronin Institute". Oral presentation, Cultivating Ensembles conference, virtual (Nov 11) https://docs.google.com/presentation/d/10Bz5HYd81Te8i6vIQfUKxfhy14Ckxb_pXoJQKB7N1ro/edit?usp=sharing
- 2022 **A. Virapongse** and E.J. Meyers. Building Empowered Communities of Practice. Technology of Participation annual gathering. Virtual (March 3)
- 2021 **A. Virapongse** and R. Duerr. The United States National Science Foundation Review Panel Experience. Ronin Seminar, virtual (June 10)
- 2021 **A. Virapongse**, J. Blythe, R. Duerr, R. Gupta, C. Gregg, Z. Robbins. Seeking Solutions: Improving the Application of Earth Science Data for Community Resilience. Organized session and presentations, ESIP meeting, Virtual (Jan 26). Recording of session: www.youtube.com/watch?v=Mr1hbe677tI <https://2021esipwintermeeting.sched.com/event/g492/seeking-solutions-improving-the-application-of-earth-science-data-for-community-resilience>
- 2019 **Virapongse, A.** Making Data Matter: Results from the ESIP community, ESIP meeting, Bethesda, MD, (Jan 16)
- 2019 **Virapongse, A.** Community Resilience for earth science data institutions and place-based communities: Introduction. ESIP meeting, Bethesda, MD, (Jan 15)

- 2018 **Virapongse, A.**, J.F. Wilkins, A. Lancaster. Independent Scholars Survey: Preliminary Results. Ronin Institute for Independent Scholarship, virtual seminar (Feb 1)
- 2018 **Virapongse, A.**, L. Barbieri, R. Duerr, C. White, B. Wee. Place-based community resilience: The socioeconomic value of Earth Science data, (ESIP) winter meeting (2018), Bethesda, Maryland, USA, (Jan 9).
- 2016 L. Barbieri, **A. Virapongse**, N. Weber. Informatics in Social-Ecological Systems. ESIP winter meeting, Bethesda, Maryland, USA (January 13). <http://commons.esipfed.org/node/950>
- 2014 P. Bourgeron, L. Alessa, J. Gosz, D. Griffith, J. Klein, H. Loescher, L. Naggy, **A. Virapongse**. iLTER Mountain SES Network: The rise of partnerships. iLTER annual meeting. Valdivia, Chile (1-3 December)
- 2012 **Virapongse, A.** Linking NTFP value chains and livelihood strategies in Maranhão, Brazil. Society for Economic Botany, Frostburg, Maryland, USA. (June 3).
- 2012 **Virapongse, A.** and M. Schmink. Socioeconomic complexity of the buriti value chain in Maranhão, Brazil. Congress of Internat. Soc. of Ethnobiology, Montpellier, France (May 25).
- 2012 **Virapongse, A.** The challenge of social diversity in forest product management: A case study of buriti palm stakeholders in Maranhão, Brazil. Southeastern council of Latin American Studies (SECOLAS), University of Florida, Gainesville, FL, USA. (March 29).
- 2010 **Virapongse, A.** An emerging market of buriti handicrafts in Maranhão, Brazil: Identifying market participants and the role of buriti in livelihood strategies. World Agroforestry Centre (ICRAF), Belém, PA, Brazil. (July 16). (Presented in Portuguese)
- 2005 **Virapongse A.**, C. Picheansoonthon, P. Leucha, and J. Konsil. A study of the traditional medicine of the Kui ethnic group. The 2nd conference of Thai traditional medicine and alternative medicine, Bangkok, Thailand. (August 30)(Presented in Thai)
- 2005 **Virapongse A** and C. Picheansoonthon. The sanding medicines: a unique method of herbal preparation among Kui traditional healers (Northeast Thailand). Society for Economic Botany annual meeting, Fort Worth, Texas, USA. (June 7)
- 2004 **Virapongse A** and C. Picheansoonthon. A Traditional Medicine System of Kui Community in NE Thailand. Intern'l Congress on Traditional Medicine and Materia Medica, Tehran, Iran. (Oct. 7)

POSTER PRESENTATIONS

- 2023 Batistto C, J Gallagher, **A Virapongse**. Using OPeNDAP In The Cloud to Connect NASA Data Centers and Support Open Data Access (IN13D-0603)(11 Dec 2023 at 2:10 - 6:30 PM PT) <https://agu.confex.com/agu/fm23/meetingapp.cgi/Paper/1347020>
- 2023 **Virapongse A.**, J. Gallagher, B. Tikoff. Sustainability of Earth Science data Infrastructure projects. Poster. EarthCube workshop: Building upon the EarthCube community, Marina del Rey, CA, June 27-28.
- 2021 J. Blythe, R. Duerr, R. Gupta, C. Gregg, Z.J. Robbins, **A. Virapongse**. Seeking Solutions: Improving the Application of Earth Science Data for Community Resilience. Poster, ESIP meeting, Virtual (Jan 26).
- 2020 Robbins ZJ, **A. Virapongse**, R. Gupta, RE Duerr, J Blythe. Conceptualizing Earth Science Data and Community Resilience ESIP 2020 Summer Meeting, Virtual (July 17th)
- 2020 **Virapongse, A.**, J. Blythe, R. Gupta, Z.J. Robbins, and R. Duerr. How Can Earth Science Data Support Community Resilience? A Problem Statement. ESIP meeting, Bethesda, MD (Jan 8).
- 2016 **Virapongse, A.** & E. C. Metcalf. Identifying data challenges of community resilience: Understanding the resilience context. International Data Week, Denver, CO (Sep. 14-17).
- 2014 **Virapongse, A.**, H. Loescher, L. Powers. National Ecological Observatory Network (NEON): Building community and seeking innovative approaches for understanding human-environmental systems. Joint annual conference for Society for Economic Botany and Society for Ethnobiology. Cherokee, NC. (May 14)

- 2011 **Virapongse, A.** Understanding participation in a forest-based market in Maranhão, Brazil. NSF Research day, University of Florida, Gainesville, FL. (October 25).
- 2009 **Virapongse, A.** The impact of the Kui traditional healer system on natural resources (Thailand). Society for Economic Botany conference, Charleston, SC. (May 31-Jun 4).
- 2008 Duchelle, A., K. Biedenweg, C. Lucas, J. Radachowsky, D. Wojcik, M. Londres, D. Alvira, W.L. Bartels, **A. Virapongse**, K. Kainer. Building capacity for tropical biology and conservation as graduate students build their own. Working Forests in the Tropics, Gainesville, FL. (Oct 6-7).
- 2006 **Virapongse A.** Ethnomedicine of the Kui. Contributed poster, Society for Economic Botany, Chiang Mai, Thailand. (June 5-9). (Morton Award for Best poster, Written in Thai & English)
- 2005 **Virapongse A.,** C. Picheansoonthon, P. Leucha, J Konsil. Medicinal plant use by Kui traditional healers (Northeast Thailand). Conference of 25th year of Faculty of Pharmaceutical Sciences, Khon Kaen University, Khon Kaen, Thailand. (Dec. 1-2) (Presented in Thai)

DEPARTMENTAL OR WORKSHOP PRESENTATIONS

- 2015 **Virapongse, A.,** H. Loescher, T.M. Bennett. Broader impacts of NEON. Presentation for Director of NSF (Cordova), NEON, Boulder, CO (Feb 19)
- 2014 **SESTEP Working Group.** Social Ecological Systems Training and Education program (SESTEP). MtnSEON Annual Meeting, Coeur d'Alene, ID (Oct 16)
- 2014 **Virapongse, A.,** M. Altaweel, D. Griffith, L. Alessa. Constructing SES Typologies for Mountain Landscapes: The Challenges. MtnSEON Annual Meeting, Coeur d'Alene, ID (Oct 16)
- 2014 **Virapongse, A.,** H. Loecher. Emergent continental environmental observatories and the new role of scientists. Dynamic biology of forest fragmentation lecture series, National Institute of Amazonian Research, Manaus, Brazil (Aug 29)(Presented in Portuguese)
- 2014 **Virapongse, A. & M. Hallett.** What is a social-ecological observatory? TCD-NEON workshop, University of Florida, USA (April 23)
- 2013 **Virapongse, A.** The effect of value chains and resource access on use and sustainability of buriti (*Mauritia flexuosa*) palm resources in Barreirinhas-MA. Dynamic biology of forest fragmentation lecture series, National Institute of Amazonian Research, Manaus, Brazil (Aug 29)(Presented in Portuguese)
- 2013 **Virapongse, A.** Accessing forest resources to participate in buriti palm (*Mauritia flexuosa*) fiber markets in Maranhão, Brazil. Exit seminar, School of Natural Resources and Environment, University of Florida, USA. (Jan 22)
- 2007 **Virapongse, A.** Ethnomedicine of the Kui (Thailand): Use of natural resources for medicines and decision making by traditional healers. Tropilunch, University of Florida, USA. (Nov 20)

FEATURED IN PODCASTS

- 2022 Portela, Pedro. It takes Two to Tango: Conversations about network governance: [Featuring Arika Virapongse and the Ronin Institute.](#)
- 2022 Jones, Claire. Visionaries in Transition. [Featuring Arika Virapongse from Middle Path EcoSolutions.](#)

WEBINAR SERIES: Co-organized

- 2020 **Virapongse, A.,** C. Beckwith, M. Davison, A. Davis. [Health & Nature webinar series](#), SHIFT, 5 webinars held from Feb-April. Success metric: >500 unique attendees.
- 2018 **Virapongse, A.,** F. Pearlman, J. Pearlman, E. Robinson. [Socioeconomic value of Earth Science data](#), Earth Science Information Partners (ESIP) webinar series, 6 webinars held from June-December

TEACHING AND CURRICULUM DEVELOPMENT

Group Thinking Sessions for Community Activation (2021) for professionals; 12 participants; a 6-week online program that met once a week; organized through Middle Path EcoSolutions.

Social-ecological systems approaches to environmental management (2016) for U.S. land managers, co-developing a 3-month certificate program, U. Montana, Missoula, MT, USA; Successful fund raising for first course at \$32,000.

Field methods for Socioeconomic Monitoring (2013, 2014) for Brazilian Amazonian protected area managers; co-developed and co-taught the 6-day course for Wildlife Conservation Society, Manaus, Brazil.

Interdisciplinary Research & Practice (Spring Semester, 2014) for UF graduate students, contributed a lecture, University of Florida, Gainesville, FL.

Environmental Policy and Socioeconomic Values (2013) for U.S. undergraduates, developed and taught the 3-month course at The School for Field Studies, Bocas del Toro, Panama.

The Amazon (2009) for UF graduate students, teaching assistant for Dr. Marianne Schmink, Center for Latin American Studies, University of Florida, Gainesville, FL.

WORKSHOPS: Invited participant

- **Transdisciplinary metrics workshop**, Belmont Forum, NSF headquarters, Alexandria, VA, June 26-28, 2019.
- **Defining ecological and social resilience in fire-prone ecosystems**, JFSP-funded workshop, U. of Montana, Missoula, MT, May 11-12, 2017.
- **Building Global Ecological Understanding**, NSF-funded workshop, U. of Delaware, Newark, DE, June 3-5, 2015.
- **Mountain Social-Ecological Observatory Network (MtnSEON)**, NSF- RCN funded annual workshop, attended as group chair, Cour d'Alene, ID, October 13-14, 2014.
- **Mountain Social-Ecological Observatory Network (MtnSEON)**, NSF- RCN funded, Chico Hot Springs, MT, May 26-28, 2014.
- **Sloping Lands Network (SLANT)**, CIFOR funded workshop to design the strategy and research plan for the network, Bogor, Indonesia, Oct 17-18, 2013.

INVITED REVIEWER

- **Research Proposal competitions**: National Science Foundation panel reviewer: Civic Innovation Challenge (CIVIC) (Oct 30 & Nov 2, 2020); Smart & Connected Communities S&CC (May 13-14, 2021), National Geographic Society (2017), Belmont Forum (2015);
- **Peer Reviewed Journals**: Sustainability Science; Ethnobotany & Research Applications; Ethnobiology; Medicinal Plants Research; Human Ecology; International J. of Fruit Science; Economic Botany; International Forestry Review; J. of Environmental Management

EXTENSION & OUTREACH: return of research results

- Ngobe indigenous communities, Panama (2013)

- Buriti palm users, Maranhão, Brazil (2013)
- General public and K-12 students, Phipps Conservatory and Botanical Gardens, Pittsburg, PA (2006-2011)