

Appendix 1.

Table A1.1. Reviewed literature, participating Indigenous groups, and categorization of participation

References	Case study/ Initiative Name	Indigenous peoples (as named in the literature)	Weighted participation score	Category of participation
Alessa et al., 2016	NA	Aleut, Central Yup'ik, Chuchki, Koryak, Siberian Yup'ik, Inuvialuit	51	2
Aswani & Weiant, 2004	NA	Roviana	58	3
Bell & Harwood, 2012	Inuvialuit Harvest Study	Inuvialuit	66	3
	Beluga Whale Study	Inuvialuit	23	1
Bellfield et al., 2015	REDD+	Makushi	52	3
Berkes et al., 2007	Inuit Bowhead knowledge study	Inuit	72	4
Brammer et al., 2016	I-Tracker	Inuit, Gwich'in, Cree, Anicinapek, Indigenous peoples of Australia, Ca Dong	57	3
Brook et al., 2009	Sahtu Wildlife Health Outreach and Monitoring Program	Sahtu Dene, Metis	43	2
Chambers et al., 2017	Climate and Oceans Support Program	Indigenous people of Australia, Micronesia, Melanesia and Polynesia	57	3
Constantino et al., 2008	NA	Kaxinawá	60	3
Constantino et al., 2012	Hunting in Indigenous Lands (HIL)	Kaxinawá	47	3
	Biodiversity and Natural Resources Monitoring Use Program of Amazonas Protected Areas (ProBUC)	Ribeirinho	54	3
	Fauna Monitoring System of the Mamiraua Institute (SMUF)	Ribeirinho	54	3
	Event Book System	Unnamed Indigenous people of Namibia	62	3
Cummings et al., 2017	NA	Makushi, Wapishiana	40	2
Danielsen et al., 2005	NA	Indigenous peoples of the Philippines	62	3
Danielsen et al., 2014	NA	Communities of Akunaaq, Kitsissuarsuit, Ilulissat and Qaarsut	68	4
Dobbs et al., 2016	NA	Nyul Nyul	69	4
Dowsley, 2009	NA	Inuit	39	2
Dubé et al., 2013	Cumulative watershed effects assessment of	"70 First Nations and Tribes"	31	1

	the Yukon River			
Eamer, 2006	Arctic Borderlands Ecological Knowledge Cooperative	Inupiat, Inuvialuit, Gwich'in	64	3
Ens et al., 2010	NA	Indigenous Australians	56	3
Fernandez-Gimenez et al., 2006	Alaska Beluga Whale Committee	Alaska Native hunters	NA	NA
Garcia & Lescuyer, 2008	Synthesis	Unnamed Indigenous groups in Cameroon and India	NA	NA
Gearheard et al., 2011	Igliniit project	Inuit	64	3
Gérin-Lajoie et al., 2018	IMALIRIJIIT	Inuit	45	2
Gill et al., 2014	NA	Teetl'it Gwich'in	64	3
Grech et al., 2014	NA	Yanyuwa	65	3
Harmsworth et al., 2011	NA	Māori	29	1
Heaslip, 2008	NA	Kwakwaka'wakw	39	1
Jamsranjav et al., 2019	NA	Mongolian Herders	45	2
Kaiser et al., 2019	Review	Rakiura Māori, Inuit	NA	NA
Kennett et al., 2010	NAILSMA Cyber-tracker	Aboriginal and Torres Strait Islander People	74	4
Kipp et al., 2019	CBWMN, CEMP	Arctic communities	47	2
	SmartICE	Arctic communities	55	3
	ENuk, ISR-CBMP	Arctic communities	63	3
Kouril et al., 2016	Review	Vezo, Hehe & Diani, Soliga, Sama-Bajou Adivasi, Aboriginal peoples, Indigenous Fijians, First Nations, Metis, Inuit, Cofan Indians of Aguarico, Kichwa	NA	NA
Lam et al., 2019	Review	First Nations, Inuit, Kaxinawá, Isoseno-Guarani, Waiwai, Xerente, Makushi, Matsigenka, Kitchwa, Purepecha, Andean Amerindian, Indigenous groups of Oceania, Indigenous groups of Africa, Indigenous groups of Adia, Native Americans	NA	NA
Lauer & Aswani, 2010	NA	Munda and Nusa Roviana	48	2
Leonard et al., 2013	NA	Miriwoong	47	2
Liebenberg et al., 1998	Cybertracker	San	41	2
Lyver & Lutsel K'e Dene First Nation, 2005	NA	Łutsël K'é Denésoliné	23	1
Lyver et al., 2008	NA	Tūhoe Tuawhenua Māori	54	3
Lyver et al., 2017	NA	Māori	51	2
Phil O.B. Lyver et al.,	NA	Tūhoe Tuawhenua Māori	51	2

2018				
McKay & Johnson, 2017	NA	Takla Lake First Nation	31	1
Moller et al., 2004	NA	James Bay Cree, Rakiura Māori, Dene, Inuit	78	4
Morishige et al., 2018	Nā Kilo'Āina Program	Native Hawaiians	60	3
Mustonen & Tossavainen, 2018	NA	Unnamed	23	1
Negi et al., 2018	NA	"Tribal people"	26	1
Nichols et al., 2004	Inuit Observations of Climate Change (IOCC) project	Inuit	54	3
Noss, 2013	NA	Isoseño-Guaraní	63	3
Oba et al., 2008	NA	Banyarwanda	45	2
Olivero et al., 2016	Forest Pulse	Baniva, Bare, Kuripaco, Warekena, Yeral	48	2
Ostertag et al., 2018	Fish and Marine Mammal Community Monitoring Program	Inuvialuit	63	3
Oviedo & Bursztyn, 2017	NA	Kaxinawá	48	2
Pacheco-Cobos et al., 2015	NA	Unnamed	31	1
Paltsyn et al., 2019	NA	Indigenous Kazakhs, Altaians	25	1
Paneque-Gálvez et al., 2017	NA	Kukama Kukamiria, Waphichana, Makushi, Harakmbut, Embera-Woonaan	46	2
Parlee et al., 2005	NA	Denésoliné	64	3
Parlee et al., 2012	NA	Lesser Slave Lake Cree	31	1
Parry & Peres, 2015	NA	"Amazonian river dwellers"	24	1
Prober et al., 2011	NA	Walpiri, Torres Strait Islander Peoples	60	3
Pulsifer et al., 2012	Review	Inuit	NA	NA
Reyes-García et al., 2019	Review	Indigenous peoples worldwide	NA	NA
Riseth et al., 2011	NA	Sámi	27	1
Roba & Oba, 2008	NA	Aarial	25	1
Roba & Oba, 2009b	NA	Aarial	33	1
Roba & Oba, 2009a	NA	Rendille	353	3
Russell et al., 2013	Arctic Borderlands Ecological Knowledge Cooperative	Communities of Aklavik, Fort MacPHerson, Tsiiigehtchic, Tukutoyuktuk, Old Crow, Arctic Village, Kaktovik	53	3
Setty et al., 2008	NA	Soliga	56	3
Shaffer, 2014	NA	Communities of Mlingotini, Makurunge, Chekereni, Rau	58	3
Sheil et al., 2015	NA	Kwersa, Torweja, Wekerig, Kawera, Paito, Bosumbaso	81	4
Shrestha & Lapeyre,	NA	Adivasi Janajati	36	1

2018				
Steiner et al., 2019	CEE Model	Inuvialuit	NA	NA
Stori et al., 2019	NA	Caicara	60	3
Straka et al., 2018	NA	Dene, Cree, Metis	35	1
Thompson et al., 2019	“We monitor by living here” project	Gitga’at	69	4
Torres et al., 2014	REDD+ monitoring	Indigenous communities of Guadalupe y Calvo and Hopelchén	53	2
Tremblay et al., 2008	NA	Inuit, Naskapi	72	4
Wheeler et al., 2019	Review	Pan-arctic communities	NA	NA
Wilson et al., 2018	Indigenous Observation Network (ION)	Carcross/Tagish, Kluane, Selkirk, Tr’ondëk Hwéch’in, White River First Nation, Taku River Tlingit First Nation	39	2
Wiseman & Bardsley, 2016	NA	Pitjantjatjara, Yankunytjatjara, Ngaanyatjaara	57	3
Ziembicki et al., 2013	NA	Aboriginal peoples of the Arnhem Plateau, Australia	32	1

Bibliography of papers reviewed

- Alessa, L., Kliskey, A., Gamble, J., Fidel, M., Beaujean, G., & Gosz, J. (2016). The Role of Indigenous Science and Local Knowledge in Integrated Observing Systems: Moving Toward Adaptive Capacity Indices and Early Warning Systems. *Sustainability Science*, 11, 91–102. <https://doi.org/10.1007/s11625-015-0295-7>
- Aswani, S., & Weiant, P. (2004). Scientific Evaluation in Women’s Participatory Management: Monitoring Marine Invertebrate Refugia in the Solomon Islands. *Human Organization*, 63(3), 301–319.
- Bell, R. K., & Harwood, L. A. (2012). Harvest-based Monitoring in the Inuvialuit Settlement Region : Steps for Success. *Arctic*, 65(4), 421–432.
- Bellfield, H., Sabogal, D., Goodman, L., & Leggett, M. (2015). Case Study Report: Community-Based Monitoring Systems for REDD+ in Guyana. *Forests*, 6, 133–156. <https://doi.org/10.3390/f6010133>
- Berkes, F., Berkes, M. K., & Fast, H. (2007). Collaborative Integrated Management in Canada’s North: The Role of Local and Traditional Knowledge and Community-Based Monitoring. *Coastal Management*, 35, 143–162. <https://doi.org/10.1080/08920750600970487>
- Brammer, J. R., Brunet, N. D., Burton, A. C., Cuerrier, A., Nielsen, F., Dewan, K., Herrmann, T. M., Jackson, M. V., Kennett, R., Larocque, G., Mulrennan, M., Pratihas, A. K., Saint-Arnaud, M., Scott, C., & Humphries, M. M. (2016). The Role of Digital Data Entry in Participatory Environmental Monitoring. *Conservation Biology*, 30(6), 1277–1287. <https://doi.org/10.1111/cobi.12727>
- Brook, R. K., Kutz, S. J., Veitch, A. M., Popko, R. A., Elkin, B. T., & Guthrie, G. (2009). Fostering Community-Based Wildlife Health Monitoring and Research in the Canadian North. *EcoHealth*, 6, 266–278. <https://doi.org/10.1007/s10393-009-0256-7>
- Chambers, L. E., Plotz, R. D., Dossis, T., Hiriasia, D. H., Malsale, P., Martin, D. J., Mitiepo, R., Tahera, K., & Tofaeono, T. I. (2017). A database for traditional knowledge of weather and

- climate in the Pacific. *Meteorological Applications*. <https://doi.org/10.1002/met.1648>
- Constantino, P. de A. L., Carlos, H. S. A., Ramalho, E. E., Rostant, L., Marinelli, C. E., Teles, D., Fonseca-Junior, S. F., Fernandes, R. B., & Valsecchi, J. (2012). Empowering Local People through Community-based Resource Monitoring : a Comparison of Brazil and Namibia. *Ecology and Society*, 17(4), 22. <http://dx.doi.org/10.5751/ES-05164-170422>
- Constantino, P., Fortini, L., & Kaxinawa, F. (2008). Indigenous Collaborative Research for Wildlife Management in Amazonia: The Case of the Kaxinawa. *Biological Conservation*, 141, 2718–2729. <https://doi.org/10.1016/j.biocon.2008.08.008>
- Cummings, A. R., Cummings, G. R., Hamer, E., Moses, P., Norman, Z., Captain, V., Bento, R., & Butler, K. (2017). Developing a UAV-Based Monitoring Program with Indigenous Peoples. *Journal of Unmanned Vehicle Systems*, 125(April), 115–125. <https://doi.org/10.1139/juvs-2016-0022>
- Danielsen, F., Jensen, A. E., Alviola, P. A., Balete, D. S., Mendoza, M., Tagtag, A., Custodio, C., & Enghoff, M. (2005). Does Monitoring Matter? A Quantitative Assessment of Management Decisions from Locally-based Monitoring of Protected Areas. *Biodiversity and Conservation*, 14, 2633–2652. <https://doi.org/10.1007/s10531-005-8392-z>
- Danielsen, F., Jensen, P. M., Burgess, N. D., Altamirano, R., Alviola, P. A., Andraianandrasana, H., Brashares, J. S., Burton, A. C., Coronado, I., Corpuz, N., Enghoff, M., Funder, M., Holt, S., Jensen, A. E., Massao, J., Mendoza, M. M., Ngaga, Y., Pipper, C. B., Poulsen, M. K., ... Young, R. (2014). A Multicountry Assessment of Tropical Resource Monitoring by Local Communities. *BioScience*, 64(3), 236–251. <https://doi.org/10.1093/biosci/biu001>
- Dobbs, R. J., Davies, C. L., Walker, M. L., Pettit, N. E., Pusey, B. J., Close, P. G., Akune, Y., Walsham, N., Smith, B., Wiggan, A., Cox, P., Ward, D. P., Tingle, F., Kennett, R., Jackson, M. V., & Davies, P. M. (2016). Collaborative Research Partnerships Inform Monitoring and Management of Aquatic Ecosystems by Indigenous Rangers. *Reviews in Fish Biology and Fisheries*, 26, 711–725. <https://doi.org/10.1007/s11160-015-9401-2>
- Dowsley, M. (2009). Community Clusters in Wildlife and Environmental Management: Using TEK and Community Involvement to Improve Co-Management in an Era of Rapid Environmental Change. *Polar Research*, 28(1), 43–59. <https://doi.org/10.1111/j.1751-8369.2008.00093.x>
- Dubé, M. G., Wilson, J. E., & Waterhouse, J. (2013). Accumulated State Assessment of the Yukon River watershed: Part II Quantitative Effects-Based Analysis Integrating Western Science and Traditional Ecological Knowledge. *Integrated Environmental Assessment and Management*, 9(3), 439–455. <https://doi.org/10.1002/ieam.1363>
- Eamer, J. (2006). Keep It Simple and Be Relevant :The First Ten Years of the Arctic Borderlands Ecological Knowledge Co-op. *Bridging Scales and Knowledge Systems*, May 2011, 185–206.
- Ens, E. J., Cooke, P., Nadjamerrek, R., Namundja, S., GarlNgarr, V., & Yibarbuk, D. (2010). Combining Aboriginal and non-Aboriginal Knowledge to Assess and Manage Feral Water Buffalo Impacts on Perennial Freshwater Springs of the Aboriginal-Owned Arnhem Plateau, Australia. *Environmental Management*, 45, 751–758. <https://doi.org/10.1007/s00267-010-9452-z>
- Fernandez-Gimenez, M. E., Huntington, H. P., & Frost, K. J. (2006). Integration or co-optation? Traditional knowledge and science in the Alaska Beluga Whale Committee. *Environmental Conservation*, 33(04), 306. <https://doi.org/10.1017/S0376892906003420>
- Garcia, C. A., & Lescuyer, G. (2008). Monitoring, Indicators and Community Based Forest

- Management in the Tropics: Pretexts or Red Herrings? *Biodiversity and Conservation*, 17, 1303–1317. <https://doi.org/10.1007/s10531-008-9347-y>
- Gearheard, S., Aporta, C., Aipellee, G., & O’Keefe, K. (2011). The Igliniit project: Inuit Hunters Document Life on the Trail to Map and Monitor Arctic Change. *The Canadian Geographer*, 55(1), 42–55. <https://doi.org/10.1111/j.1541-0064.2010.00344.x>
- Gérin-Lajoie, J., Herrmann, T. M., MacMillan, G. A., Hébert-Houle, É., Monfette, M., Rowell, J. A., Soucie, T. A., Snowball, H., Townley, E., Lévesque, E., Amyot, M., Franssen, J., & Dedieu, J. P. (2018). IMALIRIJIIT: A Community-Based Environmental Monitoring Program in the George River Watershed, Nunavik, Canada. *Ecoscience*, 25(4), 381–399. <https://doi.org/10.1080/11956860.2018.1498226>
- Gill, H., Lantz, T., & Institute, G. S. and C. (2014). A Community-Based Approach to Mapping Gwich’in Observations of Environmental Changes in the Lower Peel River Watershed, NT. *Journal of Ethnobiology*, 34(3), 294–314.
- Grech, A., Parra, G. J., Beasley, I., Bradley, J., Johnson, S., Whiting, S., li-Anthawirriyarr Sea Rangers, Yanyuwa Families, & Marsh, H. (2014). Local Assessments of Marine Mammals in Cross-Cultural Environments. *Biodiversity and Conservation*, 23, 3319–3338. <https://doi.org/10.1007/s10531-014-0783-6>
- Harmsworth, G. R., Young, R. G., Walker, D., Clapcott, J. E., & James, T. (2011). Linkages Between Cultural and Scientific Indicators of River and Stream Health. *New Zealand Journal of Marine and Freshwater Research*, 45(3), 423–436. <https://doi.org/10.1080/00288330.2011.570767>
- Heaslip, R. (2008). Monitoring Salmon Aquaculture Waste : The contribution of First Nations’ Rights, Knowledge, and Practices in British Columbia, Canada. *Marine Policy*, 32, 988–996. <https://doi.org/10.1016/j.marpol.2008.02.002>
- Jamsranjav, C., Fernández-Giménez, M. E., Reid, R. S., & Adya, B. (2019). Opportunities to integrate herders’ indicators into formal rangeland monitoring: an example from Mongolia. *Ecological Applications*, 29(5), 1–20. <https://doi.org/10.1002/eap.1899>
- Kaiser, B. A., Hoeberichts, M., Maxwell, K. H., Eerkes-medrano, L., Hilmi, N., Safa, A., Horbel, C., Juniper, S. K., Roughan, M., Lowen, N. T., Short, K., Paruru, D., Griffith, D. C., & Kaiser, B. A. (2019). *The Importance of Connected Ocean Monitoring Knowledge Systems and Communities*. 6(June), 1–17. <https://doi.org/10.3389/fmars.2019.00309>
- Kennett, R., Jackson, M., Morrison, J., & Kitchens, J. (2010). Indigenous Rights and Obligations to Manage Traditional Land and Sea Estates in Northern Australia: The Role of Indigenous Rangers and the I-Tracker Project. *Policy Matters*, 17, 135–142.
- Kipp, A., Cunsolo, A., Gillis, D., Sawatzky, A., & Harper, S. L. (2019). The need for community-led, integrated and innovative monitoring programmes when responding to the health impacts of climate change. *International Journal of Circumpolar Health*, 78(2). <https://doi.org/10.1080/22423982.2018.1517581>
- Kouril, D., Furgal, C., & Whillans, T. (2016). Trends and Key Elements in Community-Based Monitoring: a Systematic Review of the Literature with an Emphasis on Arctic and Subarctic Regions. *Environmental Reviews*, 24(2016), 151–163. <https://doi.org/dx.doi.org/10/1139/er-2015-0041>
- Lam, S., Dodd, W., Skinner, K., Papadopoulos, A., Zivot, C., Ford, J., Garcia, P. J., & Harper, S. L. (2019). Community-based monitoring of Indigenous food security in a changing climate: global trends and future directions. *Environmental Research Letters*, 14(7), 073002. <https://doi.org/10.1088/1748-9326/ab13e4>

- Lauer, M., & Aswani, S. (2010). Indigenous Knowledge and Long-term Ecological Change: Detection , Interpretation, and Responses to Changing Ecological Conditions in Pacific Island Communities. *Environmental Management*, 45, 985–997.
<https://doi.org/10.1007/s00267-010-9471-9>
- Leonard, S., Parsons, M., Olawsky, K., & Kofod, F. (2013). The Role of Culture and Traditional Knowledge in Climate Change Adaptation: Insights from East Kimberley, Australia. *Global Environmental Change*, 23(23), 623–632.
- Liebenberg, L., Blake, E., Steventon, L., Benadie, K., & Minye, J. (1998). Integrating Traditional Knowledge with Computer Science for the Conservation of Biodiversity. *8th International Conference on Hunting and Gathering Societies*.
- Lyver, P. O., & Lutsel K'e Dene First Nation. (2005). Monitoring barren-ground caribou body condition with Denesoline traditional knowledge. *Arctic*, 58(1), 44–54.
- Lyver, P.O.B., Timoti, P., Jones, C. J., Richardson, S. J., Tahi, B. L., & Greenhalgh, S. (2017). An indigenous community-based monitoring system for assessing forest health in New Zealand. *Biodiversity and Conservation*, 26, 3183–3212. <https://doi.org/10.1007/s10531-016-1142-6>
- Lyver, Phil O.B., Richardson, S. J., Gormley, A. M., Timoti, P., Jones, C. J., & Tahi, B. L. (2018). Complementarity of indigenous and western scientific approaches for monitoring forest state. *Ecological Applications*, 28(7), 1909–1923. <https://doi.org/10.1002/eap.1787>
- Lyver, Philip O Brian, Taputu, T. M., Kutia, S. T., & Tahi, B. (2008). Tūhoe Tuawhenua Mātauranga of Kererū (Hemiphaga novaseelandiae novaseelandiae) in Te Urewera. *New Zealand Journal of Ecology*, 32(1), 7–17.
- McKay, A. J., & Johnson, C. J. (2017). Confronting barriers and recognizing opportunities: Developing effective community-based environmental monitoring programs to meet the needs of Aboriginal communities. *Environmental Impact Assessment Review*, 64, 16–25. <https://doi.org/10.1016/j.eiar.2017.01.002>
- Moller, H., Berkes, F., Lyver, P. O. B., & Kislalioglu, M. (2004). Combining Science and Traditional Ecological Knowledge : Monitoring Populations for Co-Management. *Ecology And Society*, 9(3), 2. <https://doi.org/papers3://publication/uuid/2AD26F8F-0011-489A-805B-129CFCB55E06>
- Morishige, K., Andrade, P., Pascua, P., Steward, K., Cadiz, E., Kapono, L., & Chong, U. (2018). Na; Kilo'A;ina: Visions of biocultural restoration through indigenous relationships between people and place. *Sustainability (Switzerland)*, 10(10), 1–20.
<https://doi.org/10.3390/su10103368>
- Mustonen, T., & Tossavainen, T. (2018). Brook lampreys of life: towards holistic monitoring of boreal aquatic habitats using ‘subtle signs’ and oral histories. *Reviews in Fish Biology and Fisheries*, 28(3), 657–665. <https://doi.org/10.1007/s11160-018-9527-0>
- Negi, V. S., Kewlani, P., Pathak, R., Bhatt, D., Bhatt, I. D., Rawal, R. S., Sundriyal, R. C., & Nandi, S. K. (2018). Criteria and indicators for promoting cultivation and conservation of Medicinal and Aromatic Plants in Western Himalaya, India. *Ecological Indicators*, 93(May), 434–446. <https://doi.org/10.1016/j.ecolind.2018.03.032>
- Nichols, T., Berkes, F., Jolly, D., & Snow, N. B. (2004). Arctic Western from the Canadian Climate Change and Sea Ice : Local Observations. *Arctic*, 57(1), 68–79.
- Noss, R. F. (2013). Indicators for Monitoring Biodiversity : A Hierarchical Approach. *Conservation Biology*, 4(4), 355–364.
- Oba, G., Byakagaba, P., & Angassa, A. (2008). *PARTICIPATORY MONITORING OF*

- BIODIVERSITY IN EAST AFRICAN GRAZING LANDS*. 648(October), 636–648.
<https://doi.org/10.1002/ldr>
- Olivero, J., Ferri, F., Acevedo, P., Lobo, J. M., Fa, J. E., Farfan, M. A., & Romero, D. (2016). Using Indigenous Knowledge to Link Land Cover Mapping with Land use in the Venezuelan Amazon: “The Forest Pulse.” *Revista de Biología Tropical*, 64(4), 1661–1682. <https://doi.org/10.15517/rbt.v64i4.21886>
- Ostertag, S. K., Loseto, L. L., Snow, K., Lam, J., Hynes, K., & Gillman, D. V. (2018). “That’s how we know they’re healthy”: the inclusion of traditional ecological knowledge in beluga health monitoring in the Inuvialuit Settlement Region. *Arctic Science*, 320(May), 1–29. <https://doi.org/10.1139/as-2017-0050>
- Oviedo, A. F. P., & Bursztyn, M. (2017). Community-based monitoring of small-scale fisheries with digital devices in Brazilian Amazon. *Fisheries Management and Ecology*, 24(4), 320–329. <https://doi.org/10.1111/fme.12231>
- Pacheco-Cobos, L., Rosetti, M. F., Esquivel, A. M., & Hudson, R. (2015). Towards a Traditional Ecological Knowledge-Based Monitoring Scheme: A Proposal for the Case of Edible Mushrooms. *Biodiversity and Conservation*, 24, 1253–1269. <https://doi.org/10.1007/s10531-014-0856-6>
- Paltsyn, M. Y., Gibbs, J. P., & Mountrakis, G. (2019). Integrating Traditional Ecological Knowledge and Remote Sensing for Monitoring Rangeland Dynamics in the Altai Mountain Region. *Environmental Management*, 64(1), 40–51. <https://doi.org/10.1007/s00267-018-01135-6>
- Paneque-Gálvez, J., Vargas-Ramírez, N., Napoletano, B. M., & Cummings, A. (2017). Grassroots innovation using drones for indigenous mapping and monitoring. *Land*, 6(4). <https://doi.org/10.3390/land6040086>
- Parlee, B. L., Geertsema, K., & Willier, A. (2012). Social-ecological thresholds in a changing boreal landscape: Insights from cree knowledge of the Lesser Slave Lake region of Alberta, Canada. *Ecology and Society*, 17(2). <https://doi.org/10.5751/ES-04410-170220>
- Parlee, B., Manseau, M., Dene, Å. K. É., & Nation, F. (2005). Using Traditional Knowledge to Adapt to Ecological Change: Denésôliné Monitoring of Caribou Movements. *Arctic*, 58(1), 26–37.
- Parry, L., & Peres, C. A. (2015). Evaluating the Use of Local Ecological Knowledge to Monitor Hunted Tropical-Forest Wildlife over Large Spatial Scales. *Ecology and Society*, 20(3), 15. <https://doi.org/10.5751/ES-07601-200315>
- Prober, S. M., Connor, M. H. O., & Walsh, F. J. (2011). Australian Aboriginal Peoples’ Seasonal Knowledge: a Potential Basis for Shared Understanding in Environmental Management. *Ecology and Society*, 16(2). <http://www.ecologyandsociety.org/vol16/iss2/art12>
- Pulsifer, P., Gearheard, S., Huntington, H. P., Parsons, M. a., McNeave, C., & McCann, H. S. (2012). The Role of Data Management in Engaging Communities in Arctic Research: Overview of the Exchange for Local Observations and Knowledge of the Arctic (ELOKA). *Polar Geography*, 35(3,4), 1–20. <https://doi.org/10.1080/1088937X.2012.708364>
- Reyes-García, V., Fernández-Llamazares, Á., McElwee, P., Molnár, Z., Öllerer, K., Wilson, S. J., & Brondizio, E. S. (2019). The contributions of Indigenous Peoples and local communities to ecological restoration. *Restoration Ecology*, 27(1), 3–8. <https://doi.org/10.1111/rec.12894>
- Riseth, J. Å., Tømmervik, H., Helander-Renvall, E., Labba, N., Johansson, C., Malnes, E., Bjerke, J. W., Jonsson, C., Pohjola, V., Sarri, L.-E., Schanche, A., & Callaghan, T. V.

- (2011). Sámi Traditional Ecological Knowledge as a Guide to Science: Snow, Ice and Reindeer Pasture Facing Climate Change. *Polar Record*, 47(03), 202–217. <https://doi.org/10.1017/S0032247410000434>
- Roba, H. G., & Oba, G. (2008). Integration of Herder Knowledge and Ecological Methods for Land Degradation Assessment Around Sedentary Settlements in a Sub-Humid Zone in Northern Kenya. *International Journal of Sustainable Development and World Ecology*, 15, 251–264. <https://doi.org/10.3843/SusDev.15.3>
- Roba, H. G., & Oba, G. (2009a). Community Participatory Landscape Classification and Biodiversity Assessment and Monitoring of Grazing Lands in Northern Kenya. *Journal of Environmental Management*, 90, 673–682. <https://doi.org/10.1016/j.jenvman.2007.12.017>
- Roba, H. G., & Oba, G. (2009b). Efficacy of Integrating Herder Knowledge and Ecological Methods for Monitoring Rangeland Degradation in Northern Kenya. *Human Ecology*, 37(5), 589–612.
- Russell, D. E., Svoboda, M. Y., Arokium, J., & Cooley, D. (2013). Arctic Borderlands Ecological Knowledge Cooperative: Can Local Knowledge Inform Caribou Management? *Rangifer*, 33(21), 71–78. <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=90557185&site=ehost-live>
- Setty, R. S., Bawa, K., Ticktin, T., & Gowda, C. M. (2008). Evaluation of a Participatory Resource Monitoring System for Nontimber Forest Products: the Case of Amla (*Phyllanthus* spp.) Fruit Harvest by Soligas in South India. *Ecology and Society*, 13(2). <http://www.ecologyandsociety.org/vol13/iss2/art19>
- Shaffer, L. J. (2014). Making Sense of Local Climate Change in Rural Tanzania Through Knowledge Co-Production. *Journal of Ethnobiology*, 34(3), 315–334. <https://doi.org/10.2993/0278-0771-34.3.315>
- Sheil, D., Boissière, M., & Beaudoin, G. (2015). Unseen Sentinels: Local Monitoring and Control in Conservation's Blind Spots. *Ecology and Society*, 20(2is). <https://doi.org/10.5751/ES-07625-200239>
- Shrestha, Y., & Lapeyre, R. (2018). Modern Wildlife Monitoring Technologies: Conservationists versus Communities? A Case Study: The Terai-Arc Landscape, Nepal. *Conservation and Society*, 16(1), 91–101. https://doi.org/10.4103/cs.cs_111_16
- Steiner, N. S., Cheung, W. W. L., Cisneros-Montemayor, A. M., Drost, H., Hayashida, H., Hoover, C., Lam, J., Sou, T., Sumaila, U. R., Suprenand, P., Tai, T. C., & VanderZwaag, D. L. (2019). Impacts of the changing ocean-sea ice system on the key forage fish arctic cod (*Boreogadus saida*) and subsistence fisheries in the Western Canadian arctic-evaluating linked climate, ecosystem and economic (CEE) models. *Frontiers in Marine Science*, 6(APR). <https://doi.org/10.3389/fmars.2019.00179>
- Stori, F. T., Peres, C. M., Turra, A., & Pressey, R. L. (2019). Traditional ecological knowledge supports ecosystem-based management in disturbed coastal marine social-ecological systems. *Frontiers in Marine Science*, 6(SEP), 1–22. <https://doi.org/10.3389/fmars.2019.00571>
- Straka, J. R., Antoine, A., Bruno, R., Campbell, D., Campbell, R., Campbell, R., Cardina, J., Gibot, G., Gray, Q. Z., Irwin, S., Kindopp, R., Ladouceur, R., Ladouceur, W., Lankshear, J., Maclean, B., Macmillan, S., Marcel, F., Marten, G., Marten, L., ... Wiltzen, L. (2018). We used to say rats fell from the sky after a flood: Temporary recovery of muskrat following ice jams in the peace-athabasca delta. *Arctic*, 71(2), 218–228.

<https://doi.org/10.14430/arctic4714>

Thompson, K.-L., Reece, N., Robinson, N., Fisher, H.-J., Ban, N. C., & Picard., C. (2019). “We monitor by living here”: Community-driven actualization of a social-ecological monitoring program based in the knowledge of Indigenous harvesters. *Facets*, 4, 293–314.

<https://doi.org/10.1139/facets-2019-0006>

Torres, A. B., Acuña, L. A. S., & Vergara, J. M. C. (2014). Integrating CBM into Land-Use Based Mitigation Actions Implemented by Local Communities. *Forests*, 5(12), 3295–3326. <https://doi.org/10.3390/f5123295>

Tremblay, M., Furgal, C., Larrivée, C., Annanack, T., Tookalook, P., Qiisik, M., Angiyou, E., Swappie, N., Savard, J., Tremblay, M., Furgal, C., Larrivée, C., Annanack, T., Tookalook, P., Qiisik, M., Angiyou, E. L. I., Swappie, N., Savard, J., & Barrett, M. (2008). Climate Change in Northern Quebec: Adaptation Strategies from Community-Based Research. *Arctic*, 61(1), 27–34.

Wheeler, H. C., Berteaux, D., Furgal, C., Cazelles, K., Yoccoz, N. G., & Grémillet, D. (2019). Identifying key needs for the integration of social–ecological outcomes in arctic wildlife monitoring. *Conservation Biology*, 33(4), 861–872. <https://doi.org/10.1111/cobi.13257>

Wilson, N. J., Mutter, E., Inkster, J., & Satterfield, T. (2018). Community-Based Monitoring as the practice of Indigenous governance: A case study of Indigenous-led water quality monitoring in the Yukon River Basin. *Journal of Environmental Management*, 210, 290–298. <https://doi.org/10.1016/j.jenvman.2018.01.020>

Wiseman, N. D., & Bardsley, D. K. (2016). Monitoring to Learn, Learning to Monitor: A Critical Analysis of Opportunities for Indigenous Community-Based Monitoring of Environmental Change in Australian Rangelands. *Geographical Research*, 54(1), 52–71. <https://doi.org/10.1111/1745-5871.12150>

Ziembicki, M. R., Woinarski, J. C. Z., & Mackey, B. (2013). Evaluating the Status of Species using Indigenous knowledge: Novel Evidence for major Native Mammal Declines in Northern Australia. *Biological Conservation*, 157, 78–92. <https://doi.org/10.1016/j.biocon.2012.07.004>