



ECOLOGY OF COMMUNITY IN A PANDEMIC

DAVID W. KIKUCHI

David Kikuchi is an evolutionary biologist and behavioral ecologist from Elmhurst, Illinois. His early work was on the community ecology of birds in the United States and Peru. During his Ph.D. at the University of North Carolina at Chapel Hill, he studied the mechanisms that have led harmless snakes to evolve mimicry of venomous snakes. Since then, he held postdoctoral positions in Canada, Finland, Arizona, and most recently Germany, where he has worked with humans, birds, and bees. The aim of using these different systems has been to explore how the evolution of signals is shaped by the perception of animals that receive them and how the information transmitted by these signals affects ecological communities. The pursuit of social justice in the opportunity to contribute to science and mentoring students keen to understand the natural world are priorities in his academic career. – Address: Evolutionary Biology, Faculty of Biology, Bielefeld University, Konsequenz 45, 33615 Bielefeld, Germany. E-mail: dwkikuchi@gmail.com.

As a participant in the Focus Group, “Integrating Mimicry into Community Ecology,” I first learned about the Wiko in conversation with Johanna Mappes at a conference in Lisbon in 2017. She had been thinking about applying, and over the course of a long lunch of grilled *dourada* we discovered we had been thinking about similar ideas in the evolution and ecology of warning signals. After deciding to apply as a working group composed of Jonna, Marie Herberstein, and me, we were thrilled to find out that we would be spending August 2019 to June 2020 in Berlin.

Fast forward to June 30, 2020, the end of our Wiko focus year. Jonna has been in Jyväskylä since March, Mariella has been in Australia since December, and after

sequestering myself away from other Fellows for the past three months, I am starting a new postdoc position with former Wiko Fellow Klaus Reinhold in Bielefeld. A future reader who happened to flip to this page by random chance might think that we spun out of control with such force that we were flung across the globe. In fact, our Focus Group was free of drama, apart from the numerous drag motifs that featured in the Berlin night-clubs Mariella took us to, the Taylor Mac concert we attended with Sharon Strauss, and a night at a slightly edgy performance of *Dido and Aeneas*. We all had to lament the fact that we could only spend six months together before the global pandemic disrupted our harmony.

I think, then, that for me the story of the Wiko year was about how all of us tried to maintain our community across the long distances and time changes brought about by our government-imposed social isolation. The links that bind a community were made very literal by the videoconferencing software that we all used to have conversations, both public and private. When everyone gathered together for colloquia on Zoom, a little yellow box would highlight the camera feed of each individual while they spoke, providing a dynamic visualization of how our ideas moved from one person to another. With my Focus Group members, all of our collective meetings and side chats were visible in the history of my Skype window, providing a cross section of the little subgroups that spontaneously formed while our project was developing. By the time we had become veterans of video, the mainstays of my environment were apparent: our Focus Group gathered in the ephemeral hour when Florida, central Europe, and eastern Australia were all awake; I participated in Bob Holt's exciting, ecologically oriented lab meetings in Gainesville, and the Wiko colloquia reminded me of where all of our science was situated in the broader academic landscape we inhabited.

Such a pure distillation of work to the intellectual necessities risks driving you more than a touch crazy. I will forever be grateful to Sharon Strauss for handing over a small box of clay caterpillars that she had intended to use for an experiment in the Grunewald that she could not carry out because she and Mark Schwartz headed back to weather the viral storm in Davis, California. In exchange for their super-lux mattress pad from Ikea, I agreed to put out a series of transects of caterpillars to measure the attack rates that they suffered from birds. A few mornings each week, instead of continuing to wear a path in the carpet from bed to the computer, I would go out into the woods outside Villa Walther, Villa Jaffé, and the Grunewald to superglue artificial larvae to bits of foliage. It was entirely surreal to do this during the height of the pandemic when almost nobody was out, but at the same time, it did more to center me in reality than just about any other activity

I was doing at the time. Although most of my life was electronic, in the forest I had just a notebook, pen, camera, glue, clay caterpillars, green leaves, blue sky, and the dark loam of the forest floor.

The pandemic was a displacement event. Our intellectual lives were squeezed into a series of virtual tubes that connected us. But this of course couldn't meet all of our human needs for casual conversation, unstructured processing of the global catastrophe, or anything resembling fun. So in our real lives, we also found alternative pathways to connect. With a few other Fellows in similar situations, I joined a closed circle where we agreed to keep external contact to a minimum so we could enjoy each other's company. This is how we arranged a baking contest (tiramisu versus coconut cream pie – result: draw), an Easter egg hunt, and a feast of chili con carne. With this face-to-face contact, and the ability to reach out to friends and family online, it was almost like we were able to construct proxies for all the social structures that the virus had pushed away from us. I still felt caged, but a cage with plants in it is much better than one without.

As lockdown eased, it was possible to meet with larger groups of Fellows, not to stand back with hesitation when we met on the way down Winkler Straße to buy groceries. We met for gin and tonics by the lake, we got delicious Italian pizzas that we washed down with whole pint glasses of summer wine. It felt ecstatic, the way that something can only after you have been deprived of it. Without the virus, I don't know that I would have lived so powerfully the scientific fact that the human mind depends on contrast to create sensations. Without dark there is no light, and a long time in the dark only makes the light brighter. For this experience, I have the virus to thank – perhaps the farewell picnic where we took turns holding Benedict and Pamela's son Alexander, born during lockdown, would not have felt as much like the celebration of *joie de vivre* that it truly was. And so now that it is all over, if asked to summarize my thoughts on the virus, with all of its unforeseeable effects on our experience, I would say without hesitation: exterminate the little brute!