### **Ingredients for EcoTipping Point Success Stories: Questions for Book Groups**

**By Gerald Marten, author of** *Human Ecology: Basic Concepts for Sustainable Development* [online open access at <u>http://gerrymarten.com/human-ecology/tableofcontents.html]</u>

Most of what we hear about the state of Nature today is terrifyingly bad news, but all over the world people are creating islands of environmental healing in their own communities, "tipping" vicious cycles of devastation back towards resilience, diversity, and abundance. Although these stories may seem to be about very different things, on the surface—climate change, say, or water crises, deforestation, or declining fisheries—if you look at them closely, the successes have certain things in common. Pyn-Poi's triumph in *The Night Field* embodies many of these ingredients of success.

So what does it take to reverse environmental decline? Basically, you need "levers" that are strong enough to turn back vicious cycles, combined with the social organization to put those levers to good use. Real world stories about turning around environmental devastation show that certain ingredients are key to crafting successful levers and social organization (www.ecotippingpoints.org).

**1. Outside stimulation and facilitation.** The seeding actions that kick off a positive turnabout seldom bubble up from within. Outsiders are often a source of fresh ideas and encouragement. While action at the local level is essential, a success story typically begins when people or information from outside a community stimulate a new shared awareness about a problem and offer game-changing ideas for dealing with it.

How does Pyn-Poi embody the traits of an insider-outsider, someone who is enough of an outsider to bring fresh, new insights to a problem, but enough of an up-close-andpersonal insider to understand its intimate complexity?

**2. Shared community awareness and commitment.** The community *has* to work together. People need to hold a common understanding of the problem and what to do about it: They need to share a recognition of what caused it. They need to share a vision of what can be done to turn things around. And then need to share ownership of the action that must follow. The community draws on its gathered experience and resources to make its shared vision a reality.

How do you see shared vision of the People's problem percolate out from the trees to Pyn-Poi to Marak to all the Mothers and, eventually, to their entire community? How does a shared vision later mobilize the women of Tract Eleven? **3. Enduring commitment of local leadership.** Persistence is a key to success. A turnabout from decline to healing seldom comes easily. Communities have to act strongly enough to overcome the powerful forces that are driving the decline. It takes rusted and persistent leaders to inspire the deep-rooted and continuing community commitment needed for success.

## What does leadership look like in *The Night Field*? How does it act? What makes it succeed?

**4. Co-adaption between social system and ecosystem.** Social systems and ecosystems need to fit together and function as a sustainable whole. As a success story unfolds, *social commons* are created to fit the *environmental commons*. (A *commons* is a set of resources used jointly by members of a community.) Perceptions, values, knowledge, technology, social organization, and social institutions all evolve in a way that enhances the sustainability of valuable social and ecological resources. Social and environmental gains go hand in hand.

In what ways do the traditions and practices of the People reflect a long history of successful co-adaptation between the social and ecological systems? In what ways can you see that the social and ecological systems on the Farm are *not* working? In what ways do the women of Tract Eleven reach a better fit between their social and ecological systems?

**5. Letting nature do the work.** Micro-managing the world's environmental problems is far beyond human capacity. Ecotipping points give Nature a chance to marshal its self-organizing powers to restore the environment to health.

#### In what ways did Sook-Sook teach his daughter to let nature do the work? How did Pyn-Poi let nature do the work of healing the night field?

**6. Transforming waste into resources.** What appears to be "waste" – such as degraded land, abandoned buildings, garbage, sewage, or marginalized people – is mobilized and transformed into social or material value.

#### In what way was "recycling" waste into resources part of Pyn-Poi's story?

**7. Rapid results.** Quick rewards, right from the beginning, help to mobilize community commitment. Once positive results begin cascading through the social system and ecosystem, normal social, economic, and political processes can take it from there, changing vicious cycles into virtuous cycles.

#### How did rapid results mobilize the work of restoring the night field?

**8.** A powerful symbol. It is common for a charismatic leader, a prominent feature of the local landscape, or some other key image to represent the entire process in a way that crystallizes community commitment and moves community action to carry it forward.

What images and symbols energized Pyn-Poi in doing the work of restoration? If this were a purely realistic story—without the possibility of that instant mind-meld between Lakka and Pyn-Poi—what image or symbol would you have offered to mobilize the community of hungry, desperate women on Tract Eleven?

**9. Overcoming social obstacles.** The larger socio-economic system can present a lot of obstacles to success. For example:

- It imposes competing demands for people's attention, energy, and time. People are so busy, they don't have time to contribute to the social commons.
- People who feel threatened by innovation or other change try to suppress or nullify the change.
- Outsiders try to take over valuable resources after the resources are restored.
- Dysfunctional dependence on some part of the status quo prevents people from making changes necessary to break away from decline.

While it is necessary to draw upon a lot of ways to overcome such obstacles, local autonomy can go a long way toward preventing obstructive outside interference.

# What social obstacles did Pyn-Poi have to overcome to accomplish what she did? Again, if this were not a fantasy novel, what arguments and actions might she have needed to bring to bear? How did the women of Tract Eleven achieve autonomy?

**10. Social and ecological diversity.** Greater diversity offers more choices and opportunities – and better prospects that some of the choices will be good. For example, an ecosystem's species diversity enhances its capacity for self-restoration. Diversity of perceptions, values, knowledge, technology, social organization, and social institutions provide opportunities for better choices.

#### How did Pyn-Poi see, understand, and value ecological diversity? How did Naina, Lakka, and Pyn-Poi bring a diversity of strengths and perspectives to the restoration efforts?

**11. Social and ecological memory.** Social institutions, knowledge, and technology from the past have stood the test of time and often have something to offer for the present. Nature's "memory" exists in the resilience of living organisms and their intricate relationships in the ecosystem, which have emerged from the time-testing process of biological evolution.

How did *social* "memory"—in the form of stories, beliefs, and practices—shape the culture of the People? How did this "memory" travel with Pyn-Poi when she climbed into the alien land above the Wall? How does "memory" of what Pyn-Poi did ripple out in space and time from the first night field? How did stopping the poisonous spraying release the *ecological* memory of Pyn-Poi's night field?

**12. Building resilience.** "Resilience" is the ability to continue functioning in the same general way even in the face of occasional—and sometimes severe—disturbance from outside forces. Innovation works best when it not only embarks on a course of sustainability, but also enhances the resilience to withstand threats to sustainability. As ecotippping point success stories play themselves out, success breeds success as virtuous cycles emerge to amplify, reinforce, and consolidate the gains. A community's adaptive capacity – its openness to change based on shared community awareness, prudent experimentation, learning from successes and mistakes, and replicating success – is central to resilience.

As the Pyn-Poi's story progresses, what challenges arise to test the resilience of the People's way of life? Of the restored system on Tract Eleven? How do both these systems adapt to the challenges? How does Tract Eleven expand its success in a way that helps consolidate its gains?

13. And finally, what is the environmental issue that you, like Pyn-Poi, are being called on to respond to today? What are you going to do? How can you apply these principles to make your own hero's journey successful?