

## **The Three Rules of Adaptive Stewardship And Why They Are Important**

### What Is Adaptive Stewardship?

Adaptive stewardship is the idea that we are the stewards of the Earth, that we are a part of the Earth family, and that we have a responsibility for future generations. Adaptive stewardship connects us to ecology and the connection with all life. Our stewardship/management has to continuously be adapted to our changing contexts and the needs of our crops, livestock and soils. The three rules of adaptive stewardship are:

- The rule of compounding and cascading effects
- The rule of disruption
- The rule of diversity

### The Rule of Compounding and Cascading Effects

This rule focuses on the management decisions made in one point of the system that will have a cascading effect on other points over time. Nothing is separate in nature. For example:

- When we change the soil's ability to hold moisture, everything else is affected.
- Lack of water early in the season can affect germination, soil life and photosynthesis of the plants over the season.

Through observation, incremental changes can have significant long-term effects. Taking a shovel out into the field at various times of the season can show us the cascading effects of our management decisions in action.

### The Rule of Diversity

This rule focuses on the principle that diversity builds resilience by enhancing soil health and nutrient cycling. Diverse agricultural fields have at least three major plant functional groups which all work together to increase the profitability and wellbeing of the system. Plant diversity results in a wide range of phytochemicals and exudates which increase microbial activity and build soil structure. A gram of soil holds within itself a huge diversity of life and can contain billions of organisms, all contributing to the health of the ecosystem.

### The Rule of Disruption

This rule emphasizes the fact that nature is highly adaptable to disruptions. Cellular memory can be utilized to create resilience by integrating crop rotation, livestock grazing, land resting at different times of season, and forage heights. Disruption creates resilience in plants, and their memory allows them to persevere in future disturbances.