



SUSTAINING THE LAND
FOR SUSTAINABLE AGRICULTURE

By Don Stuart

Photography by Charles Gurche

As the August harvest draws near in wheat country, something unusual happens on a farm out in the Palouse area of Eastern Washington. What takes place each year on the Cochran farm has implications that can affect us all—implications for the future of food production and for our hopes for the environment.

Some of the several thousand acres of nonirrigated wheat land in this farm are owned outright by the Cochran family. This land has been in the family for three generations, and is expected to one day be handed down to a fourth. The rest of the farm is on adjoining land that the Cochrans have in recent years added to their operation by way of lease. The remarkable thing about this farm is the difference between the productivity of the land that has been in the Cochran family for three generations and the productivity of some of the adjacent land they now lease. As Larry Cochran tells it, he consistently gets more wheat per acre off the land they own than off that leased land.

Keep in mind that all this land is now farmed as a single unit, using the same management practices everywhere. The basic soil type is the same. The topography is the same. The climate is obviously the same. There's no fence or other marking to show where the Cochran land ends and the lease begins. The only real difference is the care the Cochran family has taken in the management of their land over the years. Soil biologists at Washington State University have confirmed that the soil on the adjacent fields is distinctly different. And when the wheat is ready for harvest, you can stand there and actually see the legal boundary between those properties, written in the ripening wheat, as though a line were drawn upon the earth.

Land stewardship, preserving biological diversity, and conserving soil productivity are nothing new for Larry Cochran. He is an elected supervisor with the Palouse Conservation District and one of those people who has been advocating conservation much of his life. But this is not something he created for himself. As the third generation on this farm, it is an ethic he learned from his father and from his grand-



father. And the Cochrans are not alone. For many thousands of other American farmers just like them, maybe even most farmers, the tenet of conservation is an inherent part of being a farmer. They represent mainstream agriculturists all across this country who are trying to earn a living and who, at the same time, want to do what is right for their families, for their communities and for the land.

THE IMPACT THAT FARM PRACTICES CAN HAVE UPON THE ENVIRONMENT IS MASSIVE.

They have what revered conservationist Aldo Leopold called the "land ethic." That these farmers have such an ethic is critically important for the rest of us. This is because it is not just the productivity of the Cochran's land we need to be thinking about. The reason this land produces a higher yield per acre is, among other things, because its rich, valuable topsoil is under the crop rather than having washed down a nearby stream, harming fish, or blown away in the wind, polluting the air.

It takes decades to make a difference like this. On the Cochran farm, it has taken three generations of consistent application of a whole range of conservation management practices. The practices farmers like the Cochrans use nurture complex mini-ecosystems that slowly increase productivity and protect the environment. The alternating crops they use and the way in which those crops are planted, the areas they do not cultivate on hillsides, in corners, or along the edges of their fields, the crop residue they

leave on the ground after harvest, the manner in which they manage pests, weeds, and disease, how they maintain wetlands, trees and hedgerows, how and if they till the ground, all the complicated, interrelated choices they make in the cultivation of their land have a deep, lasting impact. These choices affect the presence of beneficial insects and useful predators. They affect the richness and complexity of soil biology. And

they ultimately affect both the farm's total productivity and its environmental impact.

The impact that farm practices can have upon the environment is massive. Approximately half of the U.S. land area is in agricultural use. The 1.9 million farmers and ranchers who own and manage this land, however, represent less than 1 percent of the population. To them we entrust the environmental stewardship of this huge area of our country. Their practices affect all of us who are their neighbors. So in this day of endangered species and sprawling cities, of polluted waters and a swelling human population, we need to be asking ourselves this question: Where do the Larry Cochrans of this world come from? We obviously need more of them. Are we creating or destroying the conditions under which they thrive?

The thing that leaps out when one hears Larry Cochran's story is how patient and committed he and his family are. In this age of instant gratification, who among

