

## THE ROLE OF INDUSTRY IN CONSERVATION TILLAGE AND SUSTAINABLE AGRICULTURE

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### INTRODUCTION

Change in the agricultural arena—as in electronics, computers, etc.—has been rampant the past few years. Change has closed many doors and opened numerous others, especially in the past 10 years. Public sector budgets have been scrutinized and have gone under the knife (in some cases, maybe we should say the ax). Support for traditional programs such as the Cooperative Extension Service and applied research has dwindled.

Industry is now picking up many of the responsibilities once filled by university extension. Pioneer Hi-Bred, Inc., has had an Agronomy Service group for about 30 years in the Corn Belt. Here in the South we have had an Agronomy Service group for less than 10 years. Farmers and dealers call on our agronomists at an increasing frequency as they seek answers to all kinds of crop production questions. I'm sure that other industries have seen the same increase in demand on their technical service staff.

What does all this mean? To agriculture? To farmers? To consumers? To all of us? I don't have all the answers to these questions. However, I may have some of the answers.

As we look at the role of industry in conservation tillage and sustainable agriculture, I will highlight only a few key points. Long-term soil productivity is dependent to a large extent on soil conservation. Soil conservation, in turn, is dependent upon various kinds of conservation tillage, including no-tillage. Conservation tillage is here to stay, and sustainable agriculture is what we are all about. We are told the world population will reach about 8 billion around the middle of the 21st century. That is roughly 60% more people requiring food, fiber and other resources. The standard of living is improving for many of the developing nations around the world, and the demand for food, fiber and services will increase faster than the population growth. Agriculture is the foundation for sustaining that growth, and American agriculture can and should be leading the charge.

Now, let's focus a little more and look at some key points I will cover. 1) We should all work for the best interest of farmers—and ultimately for the consumer. 2) Industry is where the rubber meets the road. We are the

force in contact with the farmer and at the same time have the ability to communicate with the public. 3) In industry we can promote, educate and support conservation tillage and sustainable agriculture. 4) We are international in scope and infrastructure and can influence attitudes and practices around the world. Now, let's consider each of these points in more detail.

### FARMERS AND CONSUMER INTEREST

We in agriculture all work for the farmer and ultimately the consumer. If we don't work in the best interest of our customer, the farmer, we will not have a customer. This is true for industry, and it is true for university extension, university research and other public sector providers of information and services.

Too frequently, industry is portrayed as the "big bad monster" out to take advantage of the consumer. Profit is depicted as bad. Profit is what supports the research to bring new technologies and better crops on line. These new technologies and better crops enhance the farmer's position in the marketplace and also provide a more reliable food and fiber supply for the world. Practices and policies that ensure a continuing productive agriculture are essential to meeting the demands of a growing and more prosperous world citizenry.

We have a responsibility to keep our food supply safe and our environment healthy, through wise and proper use of all crop inputs and management practices. The consumer—the public—ultimately determines how well we are doing in maintaining a safe food supply and how well we communicate that fact to the public. We have a major responsibility to educate the public about the real issues and the facts, as we know them, related to safe and effective food and fiber production.

We in industry must do an even better job than we are doing to counter the negative press leveled at agriculture in general and, more specifically, at farmers and industry. Much of the negative comment comes from individuals or groups with little knowledge of crop production. Their knowledge of fertilizer nutrients, chemical and other inputs is limited. We can work to change that through our public relations efforts. We must, however, be careful that we present truth and fact. We cannot hide the dangers where they exist. Honesty is essential if we are to impact the attitudes of those with negative opinions about agriculture.

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## INDUSTRY COMMUNICATES

Industry is where the rubber meets the road. We have more direct contact with the farmers than any other group. We deliver to them the products, services and information they want and need. We have the infrastructure to reach virtually every farmer in the country. We also have the ability to provide the equipment, chemicals, fertilizers, seeds, services and information they need to be successful. We have an excellent opportunity to promote and assist in the adaption of responsible stewardship through the use of proper conservation practices. Our people are trained and experienced to help growers understand the need for and the economic value of using best management practices in most situations.

Chemical and equipment companies develop and produce products designed for conservation tillage systems. New products are continually coming to the market, products designed to do a better job conserving residues while providing an ideal seedbed for proper seed-to-soil contact. Precision farming and global positioning are now providing more information about soil variability, weed infestations, variability in yields and other factors affecting crop production. Along with this information, these technologies provide increased management opportunities within individual fields and across farming operations. Seed companies are using new technologies in plant breeding to develop crops that reduce the reliance on insecticides and are providing herbicide alternatives that are less threatening to the environment and to our water supplies. Research expenditures on all these new products and technologies are tremendous.

Because of reductions in appropriations, many universities have had to reduce their support for extension and their emphasis on applied research. Farmers therefore are more frequently looking to industry for information and assistance in crop management.

## INDUSTRY PROMOTES, EDUCATES AND SUPPORTS

Industry plays an important role in promoting soil and water conservation. Many companies promote conservation tillage and sustainable agriculture through the products they develop, produce and market. Improved products enable farmers to better manage their cropping systems, including the use of conservation tillage to protect soil and water. Other companies promote conservation in conjunction with products they sell, even though those products may not be directly involved in soil conservation or soil productivity. Seed companies are an example of this type of industry. Seed is not directly related to conservation tillage, unless one considers emergence and seedling vigor. However, we promote soil and water conservation

as a part of crop management training and information we provide to dealers and to farmers.

Industry personnel conduct hundreds of meetings each year and visit thousands of farmers on their farm. The meetings may be crop management meetings for farmers or they may be information meetings for dealers. Industry technical representatives or agronomists are contacts serving as sources of information for agricultural publications and other media types. These contacts provide numerous opportunities for companies to promote responsible stewardship of land and water. Within Pioneer Hi-Bred, Inc., each year we present an "Agronomist of the Year" award to an outstanding agronomist in our company. One criterion for earning this award is evidence that the agronomist has worked to foster environmental and conservation education.

We can support individual farmers, farm groups, community groups, state agencies, universities, government agencies and other groups as they promote and/or practice soil and water conservation and responsible stewardship of our nation's resources. One great example is the Conservation Tillage Information Center (CTIC), spawned by independent companies with a vision, including ICI, DOW, Tye, Pioneer and others, along with government agencies. These private companies and government agencies cooperated to establish a clearinghouse for conservation information in the early to mid-1980s. The CTIC is flourishing and continues to provide conservation tillage information and support to individuals and groups nationwide.

As recently as the spring of 1997, a cooperative arrangement was announced between USDA and six national agricultural companies. One of these companies was Pioneer Hi-Bred, Inc. The others include Cargill, ConAgra, Farmland Industries, Monsanto and Terra Industries. They are providing financial support to the USDA for promoting landowners' installation of conservation buffers to protect waterways.

John Deere supported publication of a Conservation Tillage Handbook several years ago. I served as an editor for this project when I was on staff at Western Illinois University. ICI a few years ago cooperated with the CTIC in promoting conservation tillage with videos and TV commercials. Many other companies have supported similar projects through the years. These few I have named serve only as examples of the role industry has played and is playing in the support and promotion of conservation tillage.

## INDUSTRY PLAYS AN INTERNATIONAL ROLE

Agriculture has become increasingly more global over the past 10 or so years. That trend is continuing. Most major agricultural companies are international in scope and infrastructure. Because of this international presence, they have the opportunity to influence attitudes, practices

and policies around the world as they conduct business. It is an opportunity to promote wise resource use and conservation to maintain a productive agriculture around the world. In the mid-70s I spent 18 months in Brazil working with the Federal University of Santa Maria in Rio Grande do Sul. I was there to help them strengthen their soil conservation program. At that same time, ICI was working closely with local farmers in that part of Brazil, providing technical assistance in the field as those farmers began to adopt no-till practices in soybean (*Glycine max* L. Merr.) production.

Loren Kruse of *Successful Farming*, has said that "If the entire world ate as well as we do in the top eight exporting countries, we'd increase exports by four times! Those of us in agriculture want to see those countries develop and earn money....and spend it for our food products." We can help ourselves if we help those countries develop and maintain their ability to produce food and fiber.

## SUMMARY

Industry has a role in conservation tillage. We have been seriously taking responsibility for that role for many years and continue doing so today. You may ask why we, in industry, are interested in supporting conservation tillage and other such endeavors. There are two major reasons. 1) Profit or business. We want to stay in business and that requires a long look. It requires us to focus on what is best for our customers—farmers—in the long haul. We must help keep farmers profitable to maintain a market for our products and services. 2) A benevolent spirit. We want to be good community citizens. Industry or companies are made up of people. As people, we too are interested in creating a better world. We live in this world. Our children live in this world. Many of us have grandchildren who live in this world. We want the generations descending from us to have at least as good a world as we have in which to live and raise families.