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Tillage Conference
For Sustainable Agriculture

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FOREWORD

The “20th Annual Southern Conservation Tillage Conference for Sustainable Agriculture” is another milestone in the history of the advancement of conservation tillage management of crops and the land on which they grow in the South. The idea of these conferences was initiated from conversations with Mr. Tony Rutz, a representative of Chevron Chemical Co. in the mid- 1970s. We decided to see if other no-tillage leaders in the Southeast would be interested in participating in such a conference and if we could obtain commitments from key individuals in each of these states to host the conferences for the first 7 yr. Dr. Raymond Gallaher rejected the suggestion that Florida host the first conference due to the youthfulness of our program. As an alternative, we decided to attempt to begin the conferences in Georgia, the most central location and where we had just completed an experiment station project entitled “Multiple Cropping and Minimum Tillage Systems for the Southeast,” and where USDA-ARS had a long history of work in the area. Dr. Joe Touchton had just replaced Dr. Raymond Gallaher at Georgia, had a new project underway, and was willing to coordinate the first meeting. We further agreed to attempt to rotate the first seven meetings north and south after the initial Georgia meeting until the first 7 yr were completed. Agreements were reached with Associate Dean Shirley Phillips at Kentucky to host the second meeting. Dr. Gallaher, in Florida, agreed to coordinate the third; Drs. Doug Worshum, M.G. Waggoner and W.M. Lewis, at North Carolina, provided leadership for the fourth; and Dr. Jim Palmer provided leadership for the fifth at South Carolina. The sixth meeting was at the University of Tennessee under the leadership of Dr. Elmer L. Ashburn and Dr. Tom C. McCutchen, and finally, Dr. Joe Touchton, who had changed professorships from the Univ. of Georgia to Auburn Univ., again provided leadership for the seventh at Auburn, AL. This made the first 7-yr commitment complete.

The general agreement was that the conferences would have a proceedings published and ready to pass out to those who registered on the first day of each conference. We wanted to have a wide range of participants including: university scientists, USDA scientists, other state and federal agencies, farmers, industry, etc. We wanted the publication to be in English units and papers presented and published so that the information would have immediate usefulness to everyone. Whenever possible we wanted to include successful farmers on the program to tell their story of how they made no-tillage and multiple cropping systems work on their farm.

As we approached the 7th “Southeastern No-

Tillage Systems Conference,” Dean Shirley Phillips at Kentucky suggested that we open up these conferences to the entire Southern states and change the name to “Southern Region No-Tillage Conferences.” Dr. Fred Boswell at Georgia suggested that we petition the Research Deans from the Southern region and make this annual conference an official working group under their advisorship. This petition was accepted and the University of Georgia became the first to host the conferences with the new title under the leadership of Dr. W.L. Hargrove and Dr. Fred Boswell. The conferences changed the name again in 1988 by replacing ‘no-tillage’ with ‘conservation tillage,’ and Mississippi State University was the first to host with the new name “Southern Conservation Tillage Conference,” under the leadership of Dr. Normie Buehring. The conferences continued to rotate among the Southern states under this name until 1993 when the words “for Sustainable Agriculture” were added to the end of the name of the working group. This name, “Southern Conservation Tillage Conference for Sustainable Agriculture,” has continued up until the present time.

Much of our success with the advancement of no-tillage multiple cropping in Florida can be traced to the first “No-Till Plus” equipment, invented by Mr. Gerald Harden, a fanner from Banks, AL. Florida received the first hand-made unit for our research program in 1976, a gift from the Harden family and Brown Mfg. Co. This invention made no-tillage a greater reality for easily compacted soils of the southern Coastal Plain. Kelly Mfg. Co., Tifton, GA and Cole Mfg. Co. of NC soon marketed other versions of this planter as well. In the 1970s and early 1980s, we saw tremendous adaptation of conservation tillage in Florida as measured by no-tillage equipment sales. At one time we had 10 no-tillage planters and drills and six post direct sprayers scattered across central and north Florida, available for on-farm use and demonstrations, all donated by industry. The initial “no-tillage plus” idea soon changed names to “in-row subsoil no-tillage” and has since changed first to “row-till” and today many are calling it “strip-till.” Whatever you want to call this type of conservation tillage, it is still alive and well in Florida.

Hundreds of manuscripts have been published in the 19 proceedings by this working group over the past 20 yr. We have had a proceedings every year but one. The nature of this show and tell working group has made a highly significant impact on conservation of our natural resources, not only in the southern U.S.A. but also literally all around the world. Many of the leaders of conservation tillage systems in the South have traveled all over the world giving short and long courses, consulting in other ways, hosted international visitors at our

workplaces and in our homes, communicated in other ways, trained national and international graduate students, etc., and have made a huge impact on conservation of natural resources for the good of mankind.

Each time a state plays host to this conference, tremendous effort is expended to involve as many of the players in conservation tillage as possible. We not only are expected to have good proceedings and an extensive exchange of oral and poster presentations but we are also expected to provide tours to show and tell what we are doing. This mode of exchange forces us to do the best job possible when it is our turn to perform this work.

Industry has been indispensable in making these conferences a success. They have come through in providing the necessary extra assistance, without which the conferences would likely not have happened. We all owe this group a round of applause. Another group who also deserve recognition include the administrative leaders of our Land Grant Institutions. For example, if it were not for the leadership of Dr. K.R. Tefertiller, former Vice President of Agriculture and Natural Resources, Univ. of Florida, many of us involved, here in Florida, with the present conference would not be here today. His leadership was the major factor in obtaining legislative approval for many new positions in IFAS (Institute of Food and Agricultural Sciences), Univ. of Florida, in the mid 1970s and 1980s in the areas of conservation tillage, multiple cropping, water conservation, pest management, etc. His leadership at national level resulted in the establishment of CARET (Council of Agricultural Research, Extension, and Teaching), a nation-wide grass roots advisory group who provide a unified national voice to promote agricultural interest. His international leadership included his promotion and support of IFAS faculty to be involved at both the national and international levels to enhance information exchange. He provided leadership in helping establish the Land Grant Teaching, Research, and Extension model in many developing countries.

Other administrators can also be cited, who have dedicated themselves to the upward movement of conservation tillage such as Dr. John Woeste, former Dean of Extension (recognized for his tremendous ability to network and his leadership in the area of a safe environmental agriculture and Dr. Al Wood (deceased), former Dean for Research who was co-author of the "Silver Bullet" that was written in cooperation with OMB and was included into President Reagan's budget that established Biotechnology as a major national research effort. We will see the results of some of this technology on 26 June as a part of the tour, in the form of Roundup Ready cotton, Roundup Ready soybean, and Liberty Link corn. Dr. James M. Davidson, present Vice President for Agriculture and Natural Resources, Univ. of Florida, among other major accomplishments, provided major

local, regional, and national leadership in the area of water quality from which we are seeing millions of dollars being invested today throughout the U.S.A. (conservation tillage plays a major role in this national research thrust area). Dr. James (Jim) App, Asst. Dean of Extension, IFAS, Univ. of Florida, is another unsung hero who, day in and day out, networks with faculty, other administrators, and the public to see that the job of carrying out major extension efforts gets done and reports are made in a timely and professional way. Another faithful individual to this conference is Dr. John I. Sewell, long-time Administrative Advisor to our working group, he deserves a note of special recognition. He faithfully participates in our meetings and provides encouragement gives us updates on what's happening in the region and assists the working group in keeping focused on our goals.

Many people deserve recognition for providing support to make this "20th Annual Southern Conservation Tillage Conference for Sustainable Agriculture" possible. Key people and organizations are listed in the program, a copy of which is permanently attached in the appendix of this proceedings. However, two organizations deserve special mention, the Florida Farm Bureau Federation and its leadership (Mr. Pat Cockrell and Mr. Carl Loop) and the USDA-NRCS and its leader (Mr. Niles Glasgow) for providing significant monetary support. Many others made significant contributions as well and are recognized as mentioned above. Special appreciation is extended to Dr. Robert McSorley and Ms. Wanda Gallaher for their long hours assisting in editing and compiling the proceeding.

We decided the theme for this conference would be "Partners for a Wholesome Food Supply." Although not all are represented, we have attempted to involve many of the partners in this conference. We have an outstanding slate of participants. You should focus on the fact that, we, the partners, are interdependent in the production of a wholesome food supply! Which of the partners can we do without? I say, none of them! Otherwise our progress for production of this wholesome food supply, while maintaining a wholesome environment for us to live in, would be greatly diminished. All of the partners are essential to our ability to meet the goal of a greater sustainable agriculture, necessary not only for people today but also for generations to come. Therefore, we must not only answer to the people in general, but we must also answer to and effectively network and communicate with all of the players in the infrastructure who are involved in the production of a wholesome food supply. Life and the natural resources on this good earth deserves no less of us.

Raymond N. Gallaher
Program Chairman