

1995 Cotton Management Economic Notes

The University of Arizona • College of Agriculture • Tucson, Arizona, 85721
 Department of Agricultural and Resource Economics

July 14, 1995

Russell Tronstad
 Extension Economist

Cotton on the Information SuperHighway

Access to global information, including information related to cotton production and market reports, is now possible on a scale and timeliness that was not possible in recent history. This global transfer of information has been made possible by a global open information network of networks, by which computers all over the world are able to communicate with one another. This conglomerate networking of computers by which information is transferred is called the Internet.

Internet History

Over thirty years ago the RAND Corporation was trying to address the problem of how US authorities could successfully communicate after a nuclear war. Any central networking station would be an obvious and immediate target for an enemy missile. In 1964 the RAND proposal was made public for a network that would "have no central authority." The network itself was assumed to be unreliable so that if big pieces of the network were blown away, the final message would still survive. In order to meet these objectives, all nodes hooked into the network would have equal status and authority to originate, pass, and receive messages. The messages themselves would be divided into packets so that

each packet would begin at a specified source node and end at another specified destination node. Each packet would be tossed like a hot potato from node to node in the basic direction of its destination, until all packets arrived at their proper ending place. The route that each packet takes is unimportant, only the final result that contains the original message sent counts.



In 1968, the National Physical Laboratory in Great Britain set up the first test network based on these principles. By December of 1969, four computers in the US were linked and could transfer data on dedicated high-speed transmission lines. This infant network was named ARPANET, after its Pentagon sponsor. One of the main purposes of ARPANET was so that scientists and researchers could share computer facilities by long distance. But by the second year of its operation, it was clear that the main traffic was not computing, but news and personal messages.

More sophisticated transmission techniques were introduced and more computers were linked together. In 1983, the military segment broke off by itself and became MILNET, even though new software called TCP/IP still linked everyone together. TCP/IP became the standard for sending electronic messages and it was public domain software. Because the technology was decentralized and rather anarchic by construction, it was difficult to stop people from linking into the network. But no one wanted to stop people from connecting. Unlike traffic on the freeway, additional users on the electronic highway can be more easily accommodated without bringing all traffic to a screeching halt.

Much like with phones and fax machines, the more people become connected to a technology, the more effective the technology becomes as a communication tool. Since each node is independent and has to handle its own financing and technical requirements to connect,

<u>Recent Prices</u>	<u>July 14, 1995</u>	
	<u>Upland</u>	<u>Pima (ELS)</u>
	(¢/lb)	(¢/lb)
Spot - uncompressed	98.77	133.75
Oct '95 Futures	78.77	
Dec '95 Futures	75.54	
Mar '96 Futures	76.90	
Adj. World Price	74.02	

Note: Upland Spot for Desert SW grade 31-3, staple 35, add 300 points for compressed bales, Pima Spot for DSW grade 03, staple 46, 6/29/95. Adjusted World Price for 7/13/95.

connecting to this branching complex of networks costs taxpayers virtually nothing. This branching complex of networks has come to be known as the "Internet." *The Internet has been compared to the English language. Nobody owns or rents English and it is up to each individual to learn how to speak English properly. Many people earn their living from using and exploiting English, just like people do on the Internet, but no one owns English or the Internet.*

Internet Cotton Resources

Internet mail or "Email," has advantages to US mail in that it is several orders of magnitude faster and free, after you are connected to the Internet. If you have access to Email you can obtain information on USDA reports and publications, three hours after they are released. The three hour time delay has been implemented at the present for security measures. If you send an e-mail message to the address of **usda-reports@usda.mannlib.cornell.edu** with **send catalog** in the body of the message, you will receive a description of all reports available from USDA that can automatically be sent to you via Email. How to obtain some of the main cotton reports are described in the adjacent table. All of these reports have a suscription fee for obtaining a hardcopy, but they are *all free if you have access to the Internet.*

Connecting to the Internet

The first two items that you need to connect to the internet are a computer and a hardware link that connects your computer to an Internet service provider. The hardware link is generally made with a high speed modem that sends messages through your existing phone line. High speed modems are generally less than \$200.

The "big three" commercial Internet service providers are America Online, Compuserve, and Prodigy. Each of these companies currently offer a one month free trial period with about 10 hours of connection time. Then the

charge is around \$10/month for 5 free hours with additional hours costing about \$3/hour. For rural areas that don't have a "local connection," 1-800 numbers are available. Access to 1-800 numbers run at around \$6/hour of connection time. AZSTARNET, by Arizona Daily Star, is a local service provider to the Internet. They have a higher monthly charge of around \$18 but offer around 80 free hours of connection time and an electronic version of the Star.

Most of the recent growth on the Internet has not been from Email but from the World Wide Web (WWW). **The WWW provides access to formatted text and graphical screens with a simple point and click interphase.** To access the WWW you must run a browser program. A browser program fetches and reads computer code from remote sources in a transparent way to the user. Browser programs are also available for free or at a low cost and are designed to operate from a wide variety of computer hardware and operating systems. These factors have led to the growth of the WWW as a method for transferring information over the Internet. Subsequently, the WWW of cotton will be covered in a later issue of this Newsletter.

Cotton Reports Available Automatically via Email

To obtain one of the reports below send an Email message to **usda-reports@usda.mannlib.cornell.edu** with the corresponding "code" included in the body of the message:

<u>Code</u>	<u>Report Obtained</u>
subscribe cotton-wool	Cotton and Wool Outlook -- 12 issues plus an Annual Yearbook.
subscribe wasde	World Agricultural Supply and Demand Estimates.
subscribe cotton-ginnings	Cotton Ginnings -- 13 issues.
subscribe crop-progress	36 Crop Production issues during the growing season plus 5 supplements.
subscribe crop-production	12 monthly issues of crop production estimates with 5 supplements.
lists	Short description of all the codes needed to obtain all available ERS, NASS, and WAOB reports.