Internet Woes

Rural areas still struggle with high-speed internet access, but new broadband initiative aims to bring better access.

by Kindra Gordon, field editor

Visit with ranch families across the country, and today, most do have internet access. It may not be the fastest; their data may be limited; and they often pay a hefty price for it. But remembering the days of dial-up service or no internet at all, most concur "some is better than none."

Angus breeder Jason ZumBrunnen and his family ranch in the scenic, but remote, grasslands along the Wyoming-Nebraska line about five miles north and twelve miles east of Lusk, Wyo.

As the fifth generation on the ZumBrunnen Angus operation, he is appreciative of what digital services they do have. He notes, "Our service has gotten better over time," but ZumBrunnen also acknowledges, "it

would be nice" to have faster service or more options of providers.

Seven years ago the ranch got satellite internet through WildBlue, now called Exede Internet. In recent years an unlimited data package was offered, and the ZumBrunnens opted for a mid-level package at \$70 per month that has improved their service.

For their 400-head registered Angus herd, they utilize the internet for American Angus Association programs and to also have a website. For their four young children, they rely on the internet for access to Wyoming Virtual Academy. For entertainment, the ZumBrunnens have gotten savvy at using their cell phone (with service through AT&T)

as a mobile hotspot to stream movies since they do not have satellite TV.

For now, ZumBrunnen says, "It works."

Wanting more

In northeastern Oregon, fellow Angus breeder Jeff Parker has similar internet experiences. When asked if he has internet issues, he says, "I suppose everyone in rural areas has some issues."

Parker runs 300 registered Angus cows at Highview Angus Ranch, which is located in a picturesque mountain valley near Enterprise, Ore.

He adds, "We are definitely rural; our county has about 7,000 people." While the town of Enterprise has high speed internet for the hospital,





county offices and school, and the ranch is only three miles from town, Parker says costs are so exorbitant he can't get a fiber-optic cable to the ranch. Thus, he uses wireless internet, paying \$60 per month for unlimited data with service through Eastern Oregon Net, Inc.

Parker currently uses the internet for Association programs including Angus Information Management Software (AIMS), and also has a website and several social media platforms. He will watch sales online and says the videos don't cut out as much as they used to.

That said, Parker describes his internet access this way: "It generally works for the things we do today, but going forward, it's not going to cut it."

If he had better internet access across the ranch, Parker sees opportunities to use more video and monitoring technology. As examples, he cites cameras for calving and internet-based monitors and sensors on his irrigation equipment. He currently uses an electric fence monitoring program that sends a text message to his cell phone if the voltage drops below a pre-set threshold. Parker explains he pays an annual fee for that service on his cell phone. He adds that with better Wi-Fi he'd still have a fee for the service, but it would be much lower.

Parker doesn't expect fiber optic internet will ever get to his ranch — or most ranches. Instead, he says, "Wireless has to get better."

He reports that the technology is available now to make an entire ranch a mobile hotspot. While that technology is still fairly expensive, he anticipates that eventually those prices will come down.

Government assistance

While rural residents are making do with current internet services, there is a national push to expand high-speed broadband access to rural areas. On April 12, 2019, Federal Communications Commission Chariman Ajit Pai announced a proposal to create a new Rural Digital Opportunity Fund, which would inject \$20.4 billion into broadband networks to connect up to 4 million rural homes and businesses with high-speed broadband over the next decade.

During his announcement, Pai stated, "This is a critical tool towards closing the digital divide and will provide some of the critical infrastructure to connecting rural Americans with 5G technologies."

Along with this effort, President Donald Trump has indicated plans to make more spectrum available for 5G

Broadband by the numbers

In February 2018, the Federal Communications Commission updated the definition of broadband, or "highspeed internet" to a minimum of 25 Mbps download and 3 Mbps upload.

A leading, multinational telecommunications conglomerate projects that the average global download speed will double from 39 Mbps in 2017 to 75 Mbps by 2022.

39% of rural Americans lack home broadband access — in contrast to only 4% of urban Americans.

Fiber optic line can cost \$15,000 per mile to lay.

beginning in December 2019. Trump has expressed, "5G networks must be secure, they must be strong, they must cover every community and be deployed as soon as possible."

Additionally, on April 30, 2019, the U.S. Department of Agriculture released its own report making the case for better broadband in rural America. The report suggests that deployment of both broadband e-Connectivity and Next Generation Precision Agriculture Technology on farms and ranches throughout the U.S. could result in at least \$47 billion in national economic benefits every year. The report also found that if broadband infrastructure and digital technologies at scale were available at a level that meets estimated producer demand, the U.S. economy could realize benefits equivalent to nearly 18% of total agriculture production.

Editor's note: The report is titled "A Case for Rural Broadband: Insights on Rural Broadband Infrastructure and Next Generation Precision Agriculture Technologies" and can be found at at www. usda.gov/sites/default/files/documents/ case-for-rural-broadband.pdf