

Rainfall Index-PRF helps manage drought risk for Hagland Farms

arly fall 2011 on the Hagland Farms found owners Jim and Carol Hagland looking at several risk management strategies for their cattle operation.

The Haglands currently operate with 245 acres of pasture and 75 acres of hay in Highland County. About 50 percent of this forage is leased from nearby property owners. The balance is owned.

Jim and Carol were both concerned about the coming production year. Late summer and early fall weather had been very dry and they were worried it would carry over into next year.

The Haglands are considering several options for addressing production risk:

- Buy hay to supplement existing hay production. This could be expensive with high hay prices and the hay could tie up needed operating capital if not used.
- Rent additional pasture. Unfortunately, this option is difficult to achieve and expensive due to the lack of locally available pasture. In addition, the Haglands prefer to keep the cows close in order to minimize calving losses, wayward cows and road hazards, and to keep transportation costs as low as possible.
- Send the calves to a custom feed yard or just sell them early. With high feed prices, added gain is likely not an economically appealing solution.
- Use the new Rainfall Index
 Pasture, Rangeland, Forage (RI-PRF)

Jim recently made insurance was aware of at a local extension meeting.

Insure against drought using Non-insured Crop Disaster Assistance Program (NAP) coverage available from the Farm Service Agency (FSA).

Like many producers, the Haglands decided on a combination of available options. They chose to utilize RI-PRF insurance for 60 acres from March 1 to April 30 and 90 acres from June 1 to July 31.

Jim and Carol also purchased insurance to cover their 75 acres of hay ground: 30 acres

covered from April 1 to May 31 and 45 acres covered from June 1 to July 31. They also budgeted \$800 to purchase 10 tons of additional hay.

Jim and Carol guessed correctly that the drought would worsen, ultimately resulting in a disaster declaration for Highland County. The winter was cold, late, and dry, with the exception of late spring snowstorms that delayed pasture use.



Table 1 shows the result of using the RI-PRF insurance for drought protection. The Haglands did not receive any indemnity payments for their spring intervals on either pasture or hay but received indemnities totaling \$622 for pasture acres

insured through the summer months and \$2,068 for hay acres.

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Total insurance premiums came to \$1,104; adding this to their \$800 hay purchase results in a total cost up front of \$1,904. This total is then subtracted from the indemnity payments, resulting in a net gain for the Haglands of \$786. **Future planning**Although the Hag

Although the Hag-

lands were proactive in their 2011 risk management, they may want to consider using NAP coverage in addition to their RI-PRF policy in the future. NAP coverage is low cost and could provide an additional drought payment.

NAP coverage applies to the whole farm. This makes all farm acres eligible for disaster assistance (as compared to only the insured acres under RI-PRF). NAP protects against total production losses of 50 percent or greater and is limited to a total payment of \$100,000.

Another risk management option Jim and Carol may want to consider for the future is the Livestock Forage Disaster Program (LFP). This program was created as part of the 2008 Farm Bill to aid livestock producers in the event of drought or fire. To be eligible, a producer must have owned the livestock for at least 60 days prior to the disaster.

Interval	Acreage	Coverage/ acre	Producer premium/acre	Indemnity/ acre	Total Indemnity	Total Premium
Pasture: March 1 to April 30	60	\$37.50	\$1.82	\$0.00	\$0	\$109
Pasture: June 1 to July 31	90	\$37.49	\$1.67	\$6.91	\$622	\$150
Hay: April 1 to May 31	30	\$249.16	\$10.85	\$0.00	\$0	\$326
Hay: June 1 to July 31	45	\$249.16	\$11.54	\$45.96	\$2,068	\$519
				Total	\$2,690	\$1,104

Table 1. Hagland Farms RI-PRF Policy Results

Not all strategies are equal in the type of risk protection they provide. Nor do these options carry equal benefits or costs. Qualifying loss must have taken place in declared disaster а county (in cases of drought) or a recognized major fire area. A producer must have either purchased Non-insured Disaster Assis-Crop tance Program (NAP) coverage or RI-PRF insurance. Like all disaster programs, income limitations apply.

Had any portion of Highland county received a "D2" drought declaration for at least 8 weeks during 2011, the Haglands would have been eligible for a one month indemnity payment under LFP because they purchased RI-

PRF coverage for their spring and summer pastures. Any disaster assistance payments would

be in addition to indemnity payments received under RI-PRF. More severe drought events or longer in duration would result in larger indemnity payments.

If the Haglands had utilized NAP coverage in 2011, they would have received two added benefits. First, the total acreage considered for any disaster payment would have been greater, assuming their fall and winter pasture was also affected by the drought. If the Haglands had sold their calves and moved their cows to fall and winter pastures early, this would have increased the total number of acres considered for forage loss and increased any LFP payments.

Secondly, where their forage losses were greater than 50 percent due to drought, the Haglands may have received an additional payment under NAP coverage. Any NAP payments received would be in addition to RI-PRF coverage payments.





Summary

In conclusion, although the Haglands are unable to avoid drought conditions, they do have several options for managing this type of production risk. Purchasing extra hay or selling calves early are more traditional methods of production risk management due to drought. These methods have a cost to participation just like the newer disaster assistance and insurance programs.

Programs for managing the risk of drought conditions include:

- The Non-insured Crop Disaster Assistance program (NAP),
- Rainfall Index Pasture, Rangeland, and Forage (RI-PRF) insurance, and
- Disaster assistance programs like the Livestock Forage Program (LFP) administered by the Farm Service Agency (FSA).

Not all strategies are equal in the type of risk protection they provide. Nor do these options carry equal benefits or costs. The best strategy is to evaluate these alternatives, like Hagland Farms has done, for the risk protection they offer verses the cost of that protection. Then put the best risk management plan into motion.

Jim and Carol are certainly glad they spent the time to carefully consider the risk drought poses for their Highland County farm and put into action a plan to help manage that risk.

Additional Resources:

USDA Farm Service Agency - Virginia: http://www.fsa.usda.gov/FSA/stateoffapp? mystate=va

USDA Risk Management Agency: http://www.rma.usda.gov

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Funding for this document was provided in part by the USDA Risk Management Agency through Partnership Agreement No. 11-IE-53102 069 with RightRisk, LLC in Fort Collins, CO.