Determining a "Fair" Price for Oats and Peas Harvested off the Field in 2022

Kevin Jarek, Crops and Soils Agent, Extension Outagamie County

Calls and questions about the value of standing forage crops in the field for the upcoming growing season are already beginning. The most important thing to understand is when I get these types of questions it is not my intent to "*set the price*" for any given commodity, but instead to offer up some considerations to be taken into account during a negotiation between a buyer and seller that ultimately results in a "fair" price for everyone involved. Here are my thoughts and ideas about what two parties may want to consider in a transaction involving a forage crop like oats and peas.

Buyer can adjust the value of oats and peas **upward** if...

1. Field/feed is very close to the farm, short travel distance resulting in less wear and tear on equipment.
2. The oats and peas are exceptional in terms of quality. I have seen oats and peas quality values reported as high as 136 RFV - rare, but has happened.
3. Competition for forage due to everyone rotating marginal/average hayfields to take advantage of $7 corn or $14+ soybeans.

Buyer can adjust the value of oats and peas **downward** if...

1. Feed is a long distance from the farm - hauling expense, especially with very high fuel prices right now.
2. Late maturity - lower quality oats (headed) and peas (podding) may test below 100 RFV.

Purchasing by the Acre

The first thing we need to do is establish the value of a comparable forage crop. In this particular case we will use the most recent Hay Market Demand and Price Report for the Upper Midwest located at: https://cropsandsoils.extension.wisc.edu/hay-market-demand-and-price-report-for-the-upper-midwest-for-april-11-2022/

Grade 2 baled hay is 103-124 RFV. Most oatlage/peas will likely test in this range... (100-120 RFV).

We would estimate 4-tons of high quality as-fed wet feed (1.6 tons of DM assuming early maturity, oats not headed, peas blossoming, but not podding) per acre @60% moisture and come up with a value of $70/wet ton to give a total harvested value of $280 acre.

How did I come up with $70/ton value at 60% as fed?

Convert $153/ton for Grade 2 baled hay to DM, so $153 ton/.87 DM (assuming 13% moisture) = $175 ton for Grade 2 DM Hay.

$175 Ton of DM X .40 DM Oats and Peas = $70/ton at 60% moisture or 40% DM ... assuming the oats wasn't heading and the peas haven't begun podding yet.

4 Tons as-fed wet tons per acre X $70/ton = $280 harvested value of the oats and peas standing in the field.

$280 total value of the harvested feed per acre - cost of harvesting = value of the feed standing in the field.

Harvesting Cost: Expenses are based on the costs reported in the **Wisconsin Custom Rate Guide 2020** at https://fyi.extension.wisc.edu/news/2021/05/12/2020-custom-rate-guide/ or the **2022 Iowa Farm Custom Rate Survey** at https://www.extension.iastate.edu/agdm/crops/pdf/a3-10.pdf. Estimated rates for individual field operations are identified below:

Mowing and Conditioning per acre:	***Windrow Merging per acre:***	***Chopping, Hauling, and Filling per acre:***
$16.61 per acre, statewide average (WI - 2020)	$14.00 per acre, statewide average (WI - 2020)	$45.00 -$65.00 per acre, $55.00 average *
$12-$25 per acre, $16.20 statewide average (IA - 2022)	$10-$15.25 per acre, $14.30 statewide average (IA - 2022)	Visit the WI Custom Rate Guide for charges expressed in *dollars/hour* or *dollars/ton* to calculate costs using those posted values.

*Estimated range based on farm data, 2020 WI Custom Rate Guide does not provide per acre cost.

Harvesting = ($17 for cutting, $14 for merging, $70 acre for chopping*) = $101 – cutting and merging values are from 2020 WI Custom Rate Guide, *chopping per acre is an estimated value from data collected from area custom harvesters, may be higher or lower dependent on equipment, chopping rates are expressed in dollars/hour in 2020 WI Custom Rate Guide and 2022 Iowa Farm Custom Rate Survey.

$280 total value - $101 = $179/acre assuming 1.6 tons of DM **High Quality** Oatlage.

If the parties involved are unsure of their harvesting costs, a general rule of thumb is that half the value of the finished product is tied up in harvesting, so if the total value of the feed is $280, that would mean we have about $140 tied up in harvesting leaving $140 acre (as opposed to $179) for 1.6 tons of DM **High Quality** Oatlage/Peas Mix.

The value off the field is likely between $140-$179 per acre.

IF the maturity is later, oats is headed and peas are setting pods, then instead of $70/ton value at 60% moisture, it is closer to $55/ton. However, in this case they are likely harvesting higher tonnage - 5 wet tons @ 60% or 2.0 tons of DM

So, 5 mature wet tons at 60% X $55 per wet ton = $275 total value - $101 (harvesting costs) = $174 acre .... so, if they are buying by the acre, that is what I suggest.

So, we are actually similar to previous example with the value is likely between $137.50 ($275 – half value tied up in harvesting) and $174 per acre (calculated above).

By the Ton

If they are purchasing by the ton, then Grade 2 alfalfa is $153 for baled hay, so using 13% moisture, a ton of DM is worth $175/ton.

$175/ton of DM X .40 DM = $70/wet ton at 60% moisture for harvested feed.

Another way to look at it would be, we harvested 4 tons of wet feed at 60% moisture so that would give us $280 (using $70/ton).

We generally say half (50%) the value/cost is tied up in harvesting, so $280 X 0.50 = $140 per acre which is basically the same value I came up with earlier.

Oatlage is somewhat difficult because of the high moisture content when it is cut requiring significant dry-down time. Any extended delays due to rain or lack of drying weather and the crop's value can decline more rapidly than some other forages. I suspect we have a range in value of $45-$50/ton on the low end (very mature, weather damaged and delayed harvest) to $75-$80 per wet ton on the high end (**IF** hay prices rise and we cut and harvest at the ideal maturity with no weather losses) this year. Results from feed analysis report can help ensure both parties are treated fairly.