Part 1: 'Hidden Valley' Meadow Fescue Grass Released to Public

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In 1990, Charles Opitz of Mineral Point, Wisconsin, discovered an unknown grass growing in a remnant of an ancient oak savanna ecosystem on his farm. After much research, we identified this grass as meadow fescue, a close relative of tall fescue and perennial ryegrass.

Over the next 10 years, Charles spread this meadow fescue around the farm by feeding ripe hay to cattle during winter and allowing the cattle to spread the seed in manure pats. Hidden Valley represents this population of meadow fescue, collected from the Opitz farm with seed produced at the University of Wisconsin Arlington Agricultural Research Station.

We believe that meadow fescue came to the Driftless Area of Wisconsin, Minnesota, and Iowa with early settlers in the 1800s and later with cattle shipped from the southern U.S. Meadow fescue was a popular forage grass until KY-31 tall fescue replaced it in the southern states by the 1950s (Figure 1). We have found meadow fescue on over 300 farms in the Driftless Area, so we think that it survived the post-World War II mechanization of agriculture in oak savanna remnants that could not be plowed.

Figure 1. Meadow fescue disappeared from the marketplace in the 1950s.

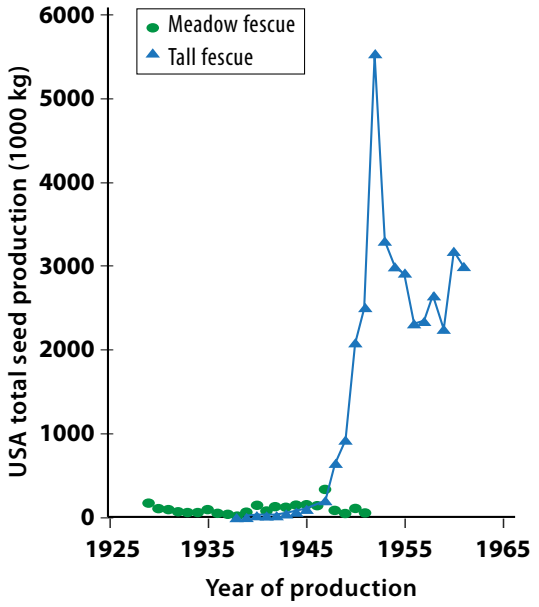


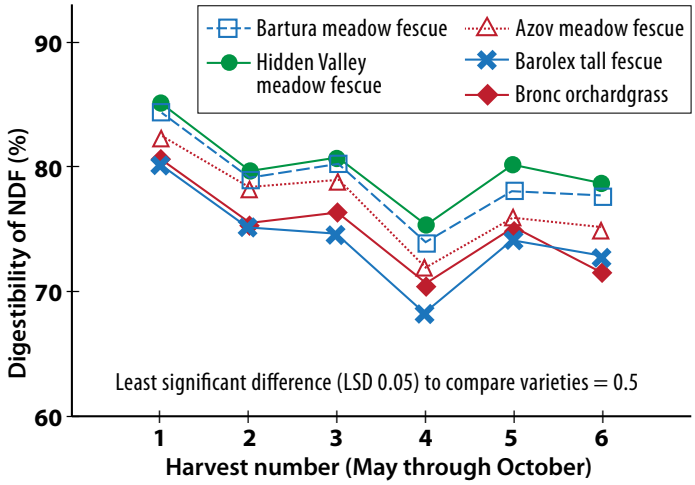
Table 1. Fiber digestibility, stocking rate, and predicted milk production of four grasses evaluated in southern and central Wisconsin (data from Geoff Brink and colleagues).

Grass Species	Fiber Digestibility (%)	Stocking Rates (cows/ac/day)	Milk Production*
Meadow Fescue	74	15	59
Orchardgrass	71	13	52
Quackgrass	67	17	50
Reed Canarygrass	70	18	53

** (lb 3.5% fat corrected milk/cow/day)*

Since we first produced seed of Hidden Valley at the Arlington farm, we have conducted numerous agronomic studies. We have found meadow fescue to be highly winter hardy and drought tolerant, with very high fiber digestibility (Table 1 and Figure 2). Its high fiber digestibility translates to increased predicted milk production even though lower forage yield reduces the potential stocking rate compared to other grasses.

Figure 2. Hidden Valley has the highest quality of all meadow fescues.



For the past 6 years, the USDA has been working to develop a release mechanism and marketing plan for Hidden Valley. Poor seed production in Oregon and market forces that favored planting corn have eliminated any interest in the customary options for commercial seed production of Hidden Valley.

In January 2013, Larry Smith volunteered to plant a seed production field of Hidden Valley at his farm in western Wisconsin. Since that time USDA has formally released Hidden Valley to the public. Anyone has the right to produce and market seed of Hidden Valley – there are no exclusive contracts or agreements with USDA or the University of Wisconsin. The variety now belongs to the public domain.

Although my role as a USDA researcher on this project is over, I would be willing to help connect people who are interested in further advancement of Hidden Valley meadow fescue. Please contact me at Michael.Casler@ars.usda.gov or call 608-890-0065.