

# FESCUE

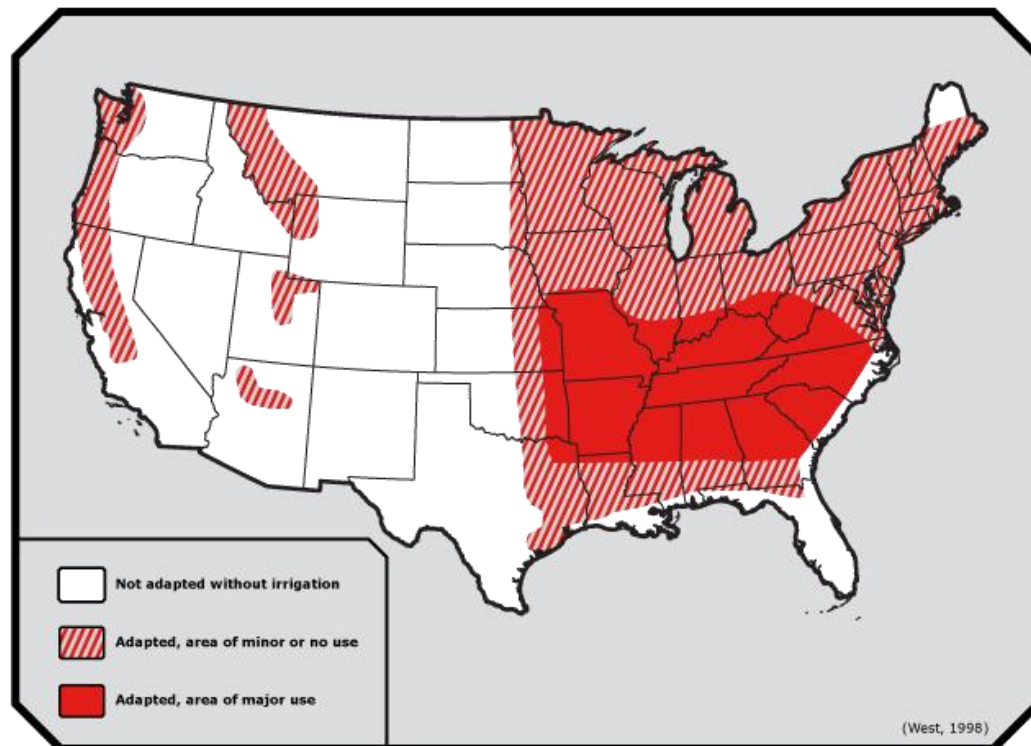
## Fescue Facts

Since the Kentucky-31 variety of tall fescue was introduced to the United States in the 1930s, cattle producers grazing the forage have dealt with negative consequences on gains and reproduction.

### Did you know?

- 1) Problems in cattle grazing fescue were first documented in the **1950s**<sup>1</sup>.
- 2) The U.S. beef industry loses **more than \$600 million**<sup>2</sup> annually due to the impact of fescue toxicosis on cattle gain and reproductive performance.
- 3) Tall fescue is the primary forage in **more than 35 million**<sup>3</sup> acres of hay and pastureland in the U.S.

### Zone of adaptation and use of tall fescue in the United States



- 4) Tall fescue is the **most widely-used cool season grass**<sup>4</sup> in the southeastern U.S.
- 5) **Over 90 percent**<sup>5</sup> of fescue is estimated to be infected with the endophyte that leads to fescue toxicosis.

- 6) Fescue endophyte has been shown to reduce weight gain by **more than 50 percent**<sup>6</sup> in steers on pasture.
- 7) **Agalactia** – the reduced ability to produce milk – **is exacerbated**<sup>7</sup> in cows that graze tall fescue during the last trimester of gestation.
- 8) **Fescue foot** is one of the most severe consequences of fescue toxicosis<sup>8</sup> and refers to a condition in which cattle become lame, sometimes losing hooves, ears and tails.
- 9) **26 percent**<sup>9</sup> of cattle in the U.S. are estimated to be exposed to endophyte-infected fescue.
- 10) The **seed heads**<sup>10</sup> of tall fescue are the most toxic components of the plant.

### Sources

<sup>1,5,8</sup>Browning, R., Jr., Ph.D. (2003). Tall Fescue Endophyte Toxicosis in Beef Cattle: Clinical Mode of Action and Potential Mitigation through Cattle Genetics. Retrieved from <http://web.extension.illinois.edu/oardc/downloads/43363.pdf>

<sup>2</sup>Hoveland, C. S. (1993). Importance and Economic Significance of the Acermonium Endophytes to Performance of Animals and Grass Plant. Retrieved from [https://www.researchgate.net/publication/223360012\\_Importance\\_and\\_Economic\\_Significance\\_of\\_the\\_Acermonium\\_Endophytes\\_to\\_Performance\\_of\\_Animals\\_and\\_Grass\\_Plant](https://www.researchgate.net/publication/223360012_Importance_and_Economic_Significance_of_the_Acermonium_Endophytes_to_Performance_of_Animals_and_Grass_Plant)

<sup>3</sup>Smith, S. R., Hall, J. B., Johnson, G. D., & Peterson, P. R. (2009). Making the Most of Tall Fescue in Virginia. Retrieved from <https://pubs.ext.vt.edu/418/418-050/418-050.html>

<sup>4</sup>Paterson, J., Forcherio, C., Larson, B., Samford, M., & Kerley, M. (2014). The effects of fescue toxicosis on beef cattle productivity. Retrieved from [https://www.researchgate.net/profile/Monty\\_Kerley/publication/15591167\\_The\\_effects\\_of\\_fescue\\_toxicosis\\_on\\_beef\\_cattle\\_productivity/links/53da61c00cf2a19eee884d1d.pdf](https://www.researchgate.net/profile/Monty_Kerley/publication/15591167_The_effects_of_fescue_toxicosis_on_beef_cattle_productivity/links/53da61c00cf2a19eee884d1d.pdf)

<sup>6,7</sup>Roberts, C. (2000). Tall Fescue Toxicosis. Retrieved from <http://extension.missouri.edu/p/G4669>

<sup>9</sup>Bussard, J. R., & Aiken, G. E. (2013). Number of Beef Cows Exposed to Toxic Tall Fescue: Small or Large? Retrieved from <http://www.afgc.org/proceedings/2013/09.pdf>

<sup>10</sup>Arnold, M., Gaskill, C., & Smith, R. (2014). Fescue Toxicosis. Retrieved from <https://www.uky.edu/Ag/Forage/ID221%20Fescue%20Toxicosis.pdf>