

2023 Top Rancher Challenge

Question	Answer	% Correct	Comments	Source
Which nutrient deficiency is commonly associated with bahiagrass decline (loss of stand) in Florida?	Potassium	22%	Potassium (K) is often a neglected nutrient when fertilizing pastures, especially given the current high cost of fertilizer. While nitrogen provides fuel for growth, K is related to the plant's ability to withstand stress. A recent research study on Florida ranches showed that K and low pH were common denominators in pastures experiencing bahiagrass decline.	https://hayandforage.com/article-2364-finding-a-solution-to-declining-bahiagrass-pastures.html
What is the first and best strategy to overcome overgrazing?	Adjust stocking rate to match pasture's carrying capacity	85%	Overgrazing is generally caused by overstocking, and the most effective solution is reducing stocking rate to match the carrying capacity of the pasture. Implementation of different grazing management techniques, such as rotational grazing, without adequate stocking rate will not result in improvements.	https://edis.ifas.ufl.edu/publication/WG006
What is an economically and environmentally sound approach to weed control?	Integrated Weed Management	85%	An integrated weed management approach involves scouting, prevention and multiple methods of control, such as biological, cultural, mechanical and chemical.	https://edis.ifas.ufl.edu/publication/WG006
Which is the more suitable species for stockpiling forage?	Limpograss	40%	Limpograss is a well-known forage in South Florida, and becoming more popular in the north. Because of the long growing season (low sensitivity to daylight changes and cold tolerance), it is more productive than bermudagrass and bahiagrass in early spring and late fall. Allied to that, it also has high digestibility even at late maturity stages, making it a desirable forage for stockpiling management. With 12 weeks of regrowth, limpograss digestibility is still over 50%, while bahiagrass is below 40%. Protein supplementation is needed, though.	https://edis.ifas.ufl.edu/publication/AG330 https://nwdistrict.ifas.ufl.edu/phag/2018/06/01/limpograss-a-potential-forage-stockpiling-option-for-north-florida/
What are the most important seed quality criteria for purchasing forage seeds?	Germination, purity, % weeds and presence of noxious weeds	75%	Using certified seeds ensures the quality of the material being bought. Certified seeds are indicated by a blue tag, will be of a specific variety, have a minimum of about 75% germination, contain an indication of purity, viability, % and discrimination of weed contaminants, and absence of noxious weeds.	https://edis.ifas.ufl.edu/publication/AG107
When supplementing cattle on a high-fiber and low-protein forage with protein (example: 2 lb of cottonseed meal per day), one of the most common effects is:	Increased intake of the forage	35%	High-fiber, low-protein forage causes a reduction in intake, because of increase in gut fill and reduction of passage rate. Providing protein supplementation will improve the microbial environment in the rumen, increase fiber digestibility and passage rate, which results in increased forage intake.	https://edis.ifas.ufl.edu/publication/AN190
What group or "family" of plants have stems that are triangular in shape (when cut) and have a "three-ranked" leaf arrangement?	Sedges	56%	Sedges are plants from the Cyperaceae family, generally present in wet areas and can tolerate a wide range of soil conditions. They are not to be confused with species such as broomsedge, a grass (Poaceae). Note that the link for this question is for turf and should be used only for referencing the species, not herbicide management.	https://edis.ifas.ufl.edu/publication/EP492
What is the recommended stubble height for Bahiagrass under rotational grazing?	3 inches	55%	Bahiagrass is tolerant to grazing, but frequent grazing to stubble shorter than 3 inches can result in reduced forage production and persistence.	https://edis.ifas.ufl.edu/publication/AG342
What are the main causes of early calf mortality (first three weeks)?	Calving problems	13%	According to USDA research, early calf mortality (less than 3 weeks old) is most commonly due to calving problems (25%) while predation, which frequently gets the blame, represents only 4.7%. Other main issues are weather-related and digestive problems.	https://www.aphis.usda.gov/animal-health/names/beefcowcalf/downloads/beef0708/Beef0708_is_Mortality_1.pdf
CIDR is a device that is placed in the vagina during most of the Estrus Synchronization and Timed-AI protocols. Which hormone is released by this device?	Progesterone	67%	CIDR stands for controlled intravaginal release device, and is a method of delivery of exogenous progesterone to help managing reproductive cycles in cows.	https://edis.ifas.ufl.edu/publication/AN277
Losing body condition score and weight during pregnancy could represent a risk for...	The cows, because if they calve with a low BCS, they will need more time for postpartum recovery.	52%	A body condition score of 5 or above at calving will help maintain high reproductive performance	https://edis.ifas.ufl.edu/publication/AN347
Which feedstuff, when fed to growing bulls, may result in increased sperm abnormalities and decreased sperm production?	Whole cottonseed	49%	Whole cottonseed has a compound called gossypol, which has been related to infertility issues in bulls if fed above recommended levels and up to 90 days prior to the beginning of the breeding season.	https://edis.ifas.ufl.edu/publication/AN130
Within how many days, postpartum, does uterine involution typically complete?	20 to 40	31%	Uterine involution happens prior to the first cycle after calving, and typically takes around 20 to 40 days to completed.	https://edis.ifas.ufl.edu/publication/AN277
It is recommended that <i>Bos indicus</i> -influenced heifers achieve ___% of their mature body weight before the breeding season starts.	60-65%	39%	While <i>Bos taurus</i> heifers are recommended to reach 55-60% of mature body weight prior to the first breeding season, <i>Bos indicus</i> should achieve 60-65%.	https://edis.ifas.ufl.edu/publication/AN329
What are the top strategies to keep kids safe on ranches?	Provide training, and keep them away from tractors and dangerous equipment	97%	Keeping kids safe is a priority; and keeping them connected to farming is our legacy. The most important part is to provide training, and avoid exposure to risk, such as from tractors and dangerous equipment.	https://nasdonline.org/1278/d001082/farm-safety-for-young-children.html
What are the top three causes of death on farms and ranches?	Machinery, Motor Vehicles, Drowning	55%	Farming is one of the most dangerous occupations in the U.S., with over 300 childhood death losses (and 24,000 injuries) each year in agriculture; a rate higher than construction, timber and mining.	https://www.ruralmutual.com/resource/farm-safety/children-on-the-farm/top-3-causes-of-agriculture-related-injuries-or-deaths-and-how-to-prevent-them/
What are the main risks of human consumption of feral hog meat?	Zoonosis, such as brucellosis, toxoplasmosis and trichinellosis	66%	Feral hogs are carriers of many transmissible diseases (for livestock) and zoonosis (for humans). Handling and consumption of (undercooked) feral hog meat is related to many zoonoses such as brucellosis, toxoplasmosis and trichinellosis. Feral hogs are known to carry at least 30 viral and bacterial diseases and nearly 40 parasites that can be harmful to humans, livestock and other wildlife	https://www.aphis.usda.gov/aphis/our-focus/wildlife-damage/operational-activities/feral-swine/feral-swine-damage/feral-swine-risks-pets-people
A 1,250 lb cow at peak lactation requires 2.2 lb of CP and 14.7 lb of TDN to maintain body weight. How many pounds of 50/50% Corn Gluten Feed/Soy hull pellets (15% CP and 67% TDN) would it take to balance her daily diet when fed free choice bahiagrass hay (8% CP and 51% TDN)? Consider that cow eats 21.2 lbs of hay, supplying 10.8 lbs of TDN and 1.7 lbs of CP	7 lbs. 50/50 CGF/SH, supplying 4.1 lb of TDN and 0.9 lb of CP	35%	Balancing diets is not easy, but tools such as the UF/IFAS Hay Balancer can help a lot, provided we have a hay analysis report in hands! In this example, the main limiting factor is energy. For a cow eating 21.2 lbs of the hay we proposed, which supplied 10.8 lbs of total digestible nutrients (TDN) and 1.7 lbs of crude protein (CP), we need to supplement with 3.9 lbs of TDN and 0.5 lbs of CP to reach the requirements of 14.7 lbs TDN and 2.2 lbs of CP. Feeding 7 lbs (as fed basis) per day of 50/50 % corn gluten feed and soy hull pellets will get just above that threshold.	https://nwdistrict.ifas.ufl.edu/phag/2018/02/23/introducing-the-new-uf-hay-balancer-decision-aid-for-cattle-ranchers/
The amount of rainfall needed following hexazinone (Velpar, etc.) needs to be at least _____ inches, but no more than _____ inches within 7 days of application.	0.25 inches and 3 inches	47%	Hexazinone is one of the most expensive herbicides in the pasture weed control toolbox and is key for controlling smutgrass. Its effectiveness, however, depends on adequate amounts of rainfall after application, so it may be absorbed by the root system.	https://edis.ifas.ufl.edu/publication/AA261
How much 19-8-15 N-P-K fertilizer is needed to achieve 65 lbs of N per acre?	342 Lbs	20%	Calculating fertilizer needs is a basic practice in most agricultural operations. The N-P-K in the label indicates the level (%) of nitrogen (N), phosphorus pentoxide (P2O5), and potassium oxide (K2O) in 100 lbs of fertilizer. With a fertilizer containing 19% N, to be able to achieve 65 lbs of N per acre, we need to apply 65 / 0.19 = 342 lbs of fertilizer per acre.	https://edis.ifas.ufl.edu/publication/SS516
What month is NOT a trading month for feeder cattle futures and options?	February	21%	Feeder cattle futures can be used by cattle producers who are looking to sell weaned calves that are ready to enter the feedlot at a weight of 600-800 pounds. Producers can potentially use futures contracts to manage price risk by locking in a price for their cattle.	https://www.cmegroup.com/education/courses/introduction-to-livestock/the-livestock-overview.html
What are the main parameters when evaluating nutritional value of forages?	Protein, fiber, digestibility	92%	There are many nutritive value parameters in forages and feed. In general, on beef cattle operations, knowing the protein and fiber content, and digestibility is enough for balancing diets to ensure proper animal nutrition. Mineral needs are important as well, and frequently met via supplemental feed.	https://edis.ifas.ufl.edu/publication/AG332