



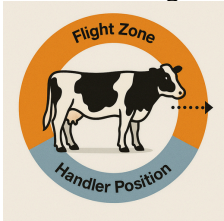



2025 Top Rancher Challenge

Question	Answer	% Correct	Comments	Source
What is usually the most critical factor in determining when to start planting and whether establishment will be successful?	Soil moisture	45%	While factors like soil fertility, temperature, and seed quality all influence pasture establishment, adequate soil moisture is the most critical. Without sufficient moisture, seeds cannot germinate, regardless of how ideal the other conditions may be. Therefore, timing planting to coincide with favorable moisture conditions is essential for successful establishment.	https://edis.ifas.ufl.edu/publication/AG107
FCA President Dale Carlton emphasized the importance of being involved outside our fences. Why is it important for ranchers to stay engaged in government and community issues?	To ensure agricultural interests are represented in policy decisions	94%	Staying engaged in government and community issues ensures that ranchers' voices are heard in policy decisions that impact agriculture and rural livelihoods. Active involvement helps protect the future of the industry and promotes informed decision-making.	https://www.floridacattlemen.org/post/july-2024-president-s-message
(True or False) After IVF, embryos must be immediately transferred to a recipient. _____	FALSE	81%	After in vitro fertilization (IVF), embryos can be either transferred fresh or cryopreserved for later use;	https://animal.ifas.ufl.edu/media/animalifasufledu/hansen-lab-website/lab-protocols/Preparation-of-in-vitro-produced-bovine-embryos-for-transfer-into-recipients.pdf
A controlled breeding season offers cow-calf producers many benefits related to management and profits. Which of the following is a benefit?	Culling reproductively unsound cattle and marketing a uniform calf crop	83%	By concentrating calving into a defined window, producers can better monitor reproductive performance, streamline labor and health protocols, and produce a more uniform calf crop—making marketing and management more efficient and profitable.	https://edis.ifas.ufl.edu/publication/AN267
What is the purpose of progesterone (hormone) in female cattle?	Maintain pregnancy	42%	Progesterone is essential for maintaining pregnancy in cattle by supporting the uterine environment and preventing estrus and ovulation during gestation	https://edis.ifas.ufl.edu/publication/AN277
What's the main purpose of the Beef Quality Assurance (BQA) program?	Ensure high-quality beef and animal welfare	94%	The BQA program promotes responsible cattle management practices that reduce safety risks, improve animal welfare, and ensure consumer confidence in beef products. It helps producers meet growing expectations for food quality, transparency, and environmental stewardship.	https://edis.ifas.ufl.edu/publication/AN170
Which combination of grazing land management practices is most effective for enhancing aquifer recharge on Florida’s ranching lands?	Establishing water control structures, maintaining seasonal wetlands, and managing grazing pressure	92%	These land management strategies help slow down and spread out water flow, allowing more rainfall to soak into the ground rather than running off. This not only supports forage growth and soil health but also boosts groundwater recharge—an essential benefit in Florida’s sandy soils and variable climate.	https://ccmedia.fdacs.gov/content/download/25408/file/cattle-operations-bmp-manual.pdf
What is driving the high cattle prices we are currently experiencing?	High beef demand and willingness to pay	34%	Cattle inventory levels are the lowest they’ve been in 74 years which is certainly influencing high cattle prices and will limit future beef production. However, strong consumer demand over the last year despite record-breaking beef prices has been the major driver of high cattle prices.	https://edis.ifas.ufl.edu/publication/FE1153
What is a "noxious weed"?	A legal designation of invasive, hard to control weeds that are forbidden in certified seeds.	60%	These weeds are prohibited in certified seed lots because they threaten agriculture, native ecosystems, and livestock health.	https://www.fdacs.gov/Agriculture-Industry/Pests-and-Diseases/Plant-Pests-and-Diseases/Noxious-Weeds
What are the main reproductive vaccines for heifers in Florida	Leptospirosis, brucellosis, vibriosis, IBR (Infectious Bovine Rhinotracheitis) and BVD (Bovine Viral Diarrhea)	86%	These diseases can cause infertility, abortion, and poor reproductive performance, so vaccinating before breeding is essential for herd health and productivity.	https://blogs.ifas.ufl.edu/jacksonco/2022/03/29/best-of-herd-essential-management-herd-health-protocols/
If you suspect a New World screwworm infection in your livestock or pets, what is the recommended first step according to FDACS guidelines?	Immediately isolate and do not move the animal. Treat and contact your veterinarian or the State Veterinarian's office.	94%	If you suspect a New World screwworm infection, clean the wound and apply an approved topical pesticide. Contact your veterinarian or the State Veterinarian’s office to report cases. Early treatment is essential to stop tissue damage and prevent the spread to other animals and to the enviroment. Reporting can be done online (www.FDACS.gov/RAD) or by phone (850-410-0900)	https://www.fdacs.gov/NWS
Animal traceability has been implemented to follow individual animals from birth to harvest for disease control and food safety. In November 2024, some new rules were implemented. Which of the options above describe those rules?	All cattle 18 months or older moving out of state need to be tagged with an EID (840 Tag)	51%	Animal traceability tracks cattle from birth to harvest to manage disease and protect markets. In addition to interstate transportation, the same rule applies to in-state movement unless cattle are going directly to slaughter, staying within the same management without commingling, or moving to an approved tagging site.	https://nwdistrict.ifas.ufl.edu/phag/2024/05/24/usda-animal-disease-traceability-update-eid-tags-and-more/
The best criteria to identify genetically superior animals is comparing animals by Estimated Progeny Difference (EPD) values for the traits of interest. This information is available in sires’ catalogs. Given the following information about the EPD for weaning weight for bulls A and B, which sentence is the most appropriate? Bull A EPD = +40 lbs and bull B EPD = +30 lbs.	bull A progeny will be 10 lbs heavier in average at weaning than bull B progeny	71%	EPDs estimate how an animal’s offspring will perform. Since Bull A’s weaning weight EPD is 10 lbs higher than Bull B’s, his calves are expected to be 10 lbs heavier at weaning, on average.	https://edis.ifas.ufl.edu/publication/AN388
The increase in intensity and frequency of extreme weather events, along with population increase in our state has magnified the impacts of climate to the society and environment. What are those effects related to?	Climate change, as we experience accelerated changes in weather patterns related to natural and anthropogenic activities	64%	Although climate change remains a controversial topic in some political circles, the shifts in weather patterns are real and increasingly influenced by human activity. Florida producers are already experiencing more frequent and extreme droughts, floods, hurricanes, and temperature swings. Recognizing and understanding these changes helps ranchers make informed decisions and safeguard their land for future generations.	https://edis.ifas.ufl.edu/publication/AE545
“If you take care of the land, it will take care of you” encourages ranchers to:	Taking care of the land so it continues to provide for future generations	90%	Taking care of the land ensures it continues to provide for future generations, promoting sustainability.	https://www.floridacattlemen.org/post/july-2024-president-s-message
In a cattle population where herd size remains stable over time, how does the methane emitted by these cattle affect atmospheric carbon levels?	It cycles through the atmosphere without increasing net carbon	72%	In a stable herd, methane from cattle is part of the biogenic carbon cycle: cattle consume plants that have absorbed CO ₂ and emit methane from the digestion process. After about a decade, it breaks down into CO ₂ and water, which is reabsorbed by plants, resulting in no net increase in atmospheric carbon.	https://clear.ucdavis.edu/explainers/biogenic-carbon-cycle-and-cattle
When applying 200 lb/acre of a 20-5-10 N-P-K fertilizer, how many lbs of Nitrogen and of Potassium (K2O) are being applied?	40 lbs of N and 20 lbs of K2O	49%	Applying 200 lb/acre of a 20-5-10 N-P-K fertilizer results in 40 lbs of Nitrogen and 20 lbs of Potassium (K2O) being applied.	https://gardeningssolution.s.ifas.ufl.edu/care/fertilizer/fertilizer/

2025 Youth Rancher Challenge



Question	Answer	% Correct	Comments	Source
Florida is known for being home to the earliest cattle ranching in America. Who helped introduce cattle to Florida?	Spanish explorers, specifically Ponce de Leon in 1521	79%	Spanish explorer Juan Ponce de Leon brought the first cattle to Florida in 1521, laying the foundation for the state's cattle industry. These hardy animals adapted well to Florida's subtropical environment.	https://blogs.ifas.ufl.edu/suwanneeco/2024/07/10/the-history-of-the-florida-cattle-industry/
Which breeding strategy is commonly used in Florida to improve heat tolerance and parasite resistance?	Crossbreeding	71%	Crossbreeding combines traits from different breeds to enhance adaptability, such as heat tolerance and resistance to parasites—key for livestock survival in Florida’s hot, humid climate.	https://extension.msstate.edu/sites/default/files/publications/publications/P3888_web.pdf
What is the formula to calculate profit?	Revenue - Fixed Costs - Variable Costs = Profit	57%	Profit is determined by subtracting all costs—both fixed (e.g., rent, equipment) and variable (e.g., feed, labor)—from total revenue. This formula helps producers assess financial performance and make informed decisions about pricing and cost control	https://blogs.ifas.ufl.edu/polkco/2023/01/09/cow-calf-breakeven-calculator/
How can well-managed ranchlands in Florida help recharge underground aquifers?	By slowing surface water runoff with vegetation and allowing more infiltration	68%	Vegetation on ranchlands reduces runoff and enhances water infiltration into the soil, helping replenish Floridas aquifers. This natural process supports both water conservation and ecosystem health.	https://ccmedia.fdacs.gov/content/download/25408/file/cattle-operations-bmp-manual.pdf
Feedstuff such as hay and silage are classified as:	Roughages	67%	Roughages are high-fiber feedstuffs that are essential for proper rumen function in ruminants. They promote chewing and saliva production, which help buffer rumen pH and support digestion.	https://courses.ecampus.oregonstate.edu/ans312/our/intro_rough_trans.htm
What is the weed in the picture below? 	Tropical soda apple	71%	Tropical soda apple is an invasive plant in Florida pastures, easily identified by its thorny stems and mottled green fruit that resemble small watermelons. It spreads rapidly and reduces forage quality, making early identification and control essential	https://edis.ifas.ufl.edu/publication/uw097
The steak below can be separated in 2 different cuts. What are those cuts? 	New York strip and filet mignon	32%	The T-bone or porterhouse steak includes two premium cuts: the tenderloin (filet mignon) on one side and the strip loin (New York strip) on the other. These cuts differ in tenderness and flavor, offering a combination of textures in one steak	https://extension.sdstate.edu/picking-perfect-steak
The abnormal condition in ruminants caused by an accumulation of gas, especially when grazing certain clovers, is called?	Bloat	79%	Bloat occurs when gas builds up in the rumen and cannot be expelled, often due to rapid fermentation of lush forages or physical blockage. It can lead to severe discomfort or death if not treated promptly.	https://ufdcimages.uflib.ufl.edu/ir/00/00/37/55/00001/vm12200.pdf
From the practices below, which one is the first and most effective weed management strategy?	Preventing weed encroachment through proper pasture management	55%	Healthy, well-managed pastures resist weed invasion by maintaining dense forage cover. Prevention is more cost-effective and sustainable than chemical or mechanical weed control.	https://edis.ifas.ufl.edu/publication/WG006
What is a "noxious weed"?	A legal designation of invasive, hard to control weeds that are forbidden in certified seeds.	34%	These weeds are prohibited in certified seed lots because they threaten agriculture, native ecosystems, and livestock health.	https://www.fdacs.gov/Agriculture-Industry/Pests-and-Diseases/Plant-Pests-and-Diseases/Noxious-Weeds
What are signs of climate change that we can see a direct impact in our lives?	Increased frequency and intensity of extreme events	44%	Climate change is linked to more frequent and severe extreme weather events, such as hurricanes, floods, droughts, and heatwaves. These events disrupt agriculture, infrastructure, and public health, making the impacts of climate change increasingly visible in our daily lives.	https://edis.ifas.ufl.edu/publication/AE545
You are trying to move a cow calmly through a gate. Where should you stand to encourage the cow to move forward without scaring it? 	Moving between the pressure and flight zone, standing behind its point of balance	64%	Cattle move away from pressure when their flight zone is entered. Standing just behind the point of balance (usually at the shoulder) encourages forward movement without causing panic	https://blogs.ifas.ufl.edu/polkco/2017/10/19/reducing-handling-stress-improves-livestock-productivity/
What does this warning sign tell you to do when working around farm equipment? 	Keep hands and loose clothing away from moving parts	95%	Farm machinery can catch loose clothing or body parts, leading to serious injury. Warning signs remind workers to stay alert and avoid contact with moving components	https://sfyl.ifas.ufl.edu/agriculture/maintenance-safety/
What's the main purpose of the Beef Quality Assurance (BQA) program?	Ensure high-quality beef and animal welfare	88%	The BQA program promotes responsible cattle management practices that reduce safety risks, improve animal welfare, and ensure consumer confidence in beef products. It helps producers meet growing expectations for food quality, transparency, and environmental stewardship.	https://edis.ifas.ufl.edu/publication/AN170
Which of the following pesticide signal words indicates highest toxicity?	Danger	87%	Pesticide labels use signal words to indicate toxicity: “Caution” (low), “Warning” (moderate), and “Danger” (high). “Danger” signals the highest risk and requires the most protective measures	https://blogs.ifas.ufl.edu/sarasotaco/2023/02/01/practicing-pesticide-safety/
President Dale Carlton emphasized the importance of being involved outside our fences. Why is it important for ranchers to stay engaged in government and community issues?	To ensure agricultural interests are represented in policy decisions	72%	Staying engaged in government and community issues ensures that ranchers' voices are heard in policy decisions that impact agriculture and rural livelihoods. Active involvement helps protect the future of the industry and promotes informed decision-making.	https://www.floridacattlemen.org/post/july-2024-president-s-message
“If you take care of the land, it will take care of you” encourages ranchers to:	Taking care of the land so it continues to provide for future generations	77%	Taking care of the land ensures it continues to provide for future generations, promoting sustainability.	https://www.floridacattlemen.org/post/july-2024-president-s-message