**HW Module 10: Perennial grass biomes & energy - KEY**

1. Compare and contrast the advantages and disadvantages of annual vs. perennial herbaceous biomass crops.

2. Describe at least four characteristics of switchgrass that make it a promising species for grass energy production.

3. What advantage(s) are there to cutting energy grass in the fall and letting it overwinter in the field prior to baling and use?

4. Why does adding wood to grass create “better” pellets? In what way are they better pellets?

5. What is the major disadvantage of the grass pellet when compared to the wood pellet?

6. What types of heating appliances are best suited to burning densified grass?
*(Give two examples.)*

7. Describe the ‘chicken or egg’ problem that is an issue for development of grass biomass fuels.

8. What are the simplest advantages of C4 vs C3 photosythesizing grasses?

9. Densifying any form of solid biomass has advantages and disadvantages. Compare and contrast two forms of densified and least processed biomass and make a case for the superiority of one.

10. What steps can farmers take to minimize ash content while growing and harvesting energy grasses?