KANSAS STATE UNIVERSITY | Olathe

Hemp Field Sampling Instructions

A. Supplies and equipment
   1. Paper Bag
   2. Permanent marker for labeling samples
   3. Pruning shears for collecting samples
   4. Surface disinfectant (such alcohol wipes) for sanitizing shears between samples

B. Instructions for collecting a sample

Definition of a sample: A collection of cuttings that represent one contiguous "research area," field location, or hemp variety. The lab will homogenize the sample and generate a single report.

   1. Take cuttings according to the "selection of plant cuttings" and "sampling patterns" section below. Avoid sampling diseased or damaged plant material. Only take one cutting per plant.
   2. Take cuttings from at least 5 plants to represent one composite sample. Put cuttings in a paper bag.
   3. Label the bag with the sampling date and time, the number of cuttings, the sample name of your choice, and your last name or KDA license number.
   4. If wishing to have more than one sample tested (i.e. different "research areas," field locations, or hemp varieties) cuttings should be separated into different paper bags and be appropriately labeled. Note: each additional sample will incur a sample test cost.
   5. If collecting more than one sample, clean shears before moving to the next sample.

C. Selection of plant cuttings
   1. Fiber and Grain varieties (monoecious and dioecious)
      a. Vegetative (fiber varieties only)
         1. Terminal 20 cm of the main or axillary shoot. A single sample from a plant should include a meristem, shoot material, and developed and undeveloped foliar material.
      b. Reproductive (female inflorescences only)
         1. Terminal 20 cm of the main or axillary female inflorescence (raceme). The majority of the sample's composition should contain the pistillate flowers, but it may contain some peduncle, pedicel, and some foliar materials. If seeds are present, the seeds should be removed from the plant material while not allowing the seeds to fall to the ground. Removed seeds should be discarded appropriately.
   2. Floral (CBD) varieties (generally dioecious)
      a. Vegetative
         1. Terminal 20 cm of the main or axillary shoot. A single sample from a plant should include a meristem, shoot material, and developed and undeveloped foliar material.
      b. Reproductive (female plants and inflorescences only)
         1. Terminal 20 cm of the main or axillary female inflorescence (raceme). The majority of the sample's composition should contain the pistillate flowers, but it may contain some peduncle, pedicel, bract, and some foliar materials. Seeds should be removed from the collected plant material if present and should not fall to the ground. Removed seeds should be discarded appropriately.

D. Sampling pattern- Depending on the physical shape of the research area or research area, the subplot sample pattern may differ. Please refer to the figures associated with approximate shape of possible research area. The figures associated with each geometric shape represent a rough sampling pattern. The figures are not indicative of how may samples should be collected per research area or research area subplot. (See following pages for Figures 1-4).

1. Square- *Figure 1*
2. Rectangle- *Figure 2*
3. Circle/Oval- *Figure 3*
4. Irregular- *Figure 4*

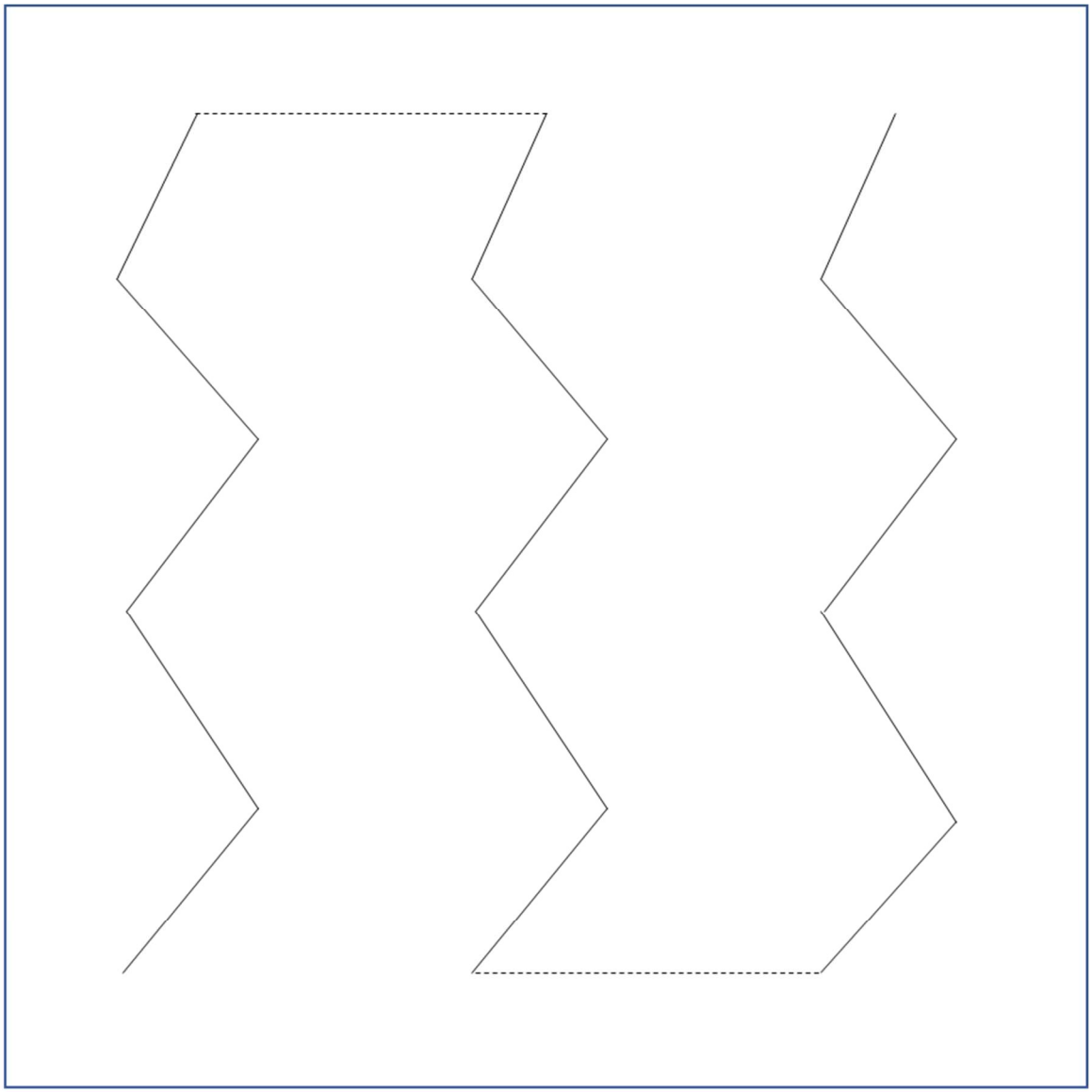

Figure 1- Sampling pattern for research areas/subplots of a shape similar to a square

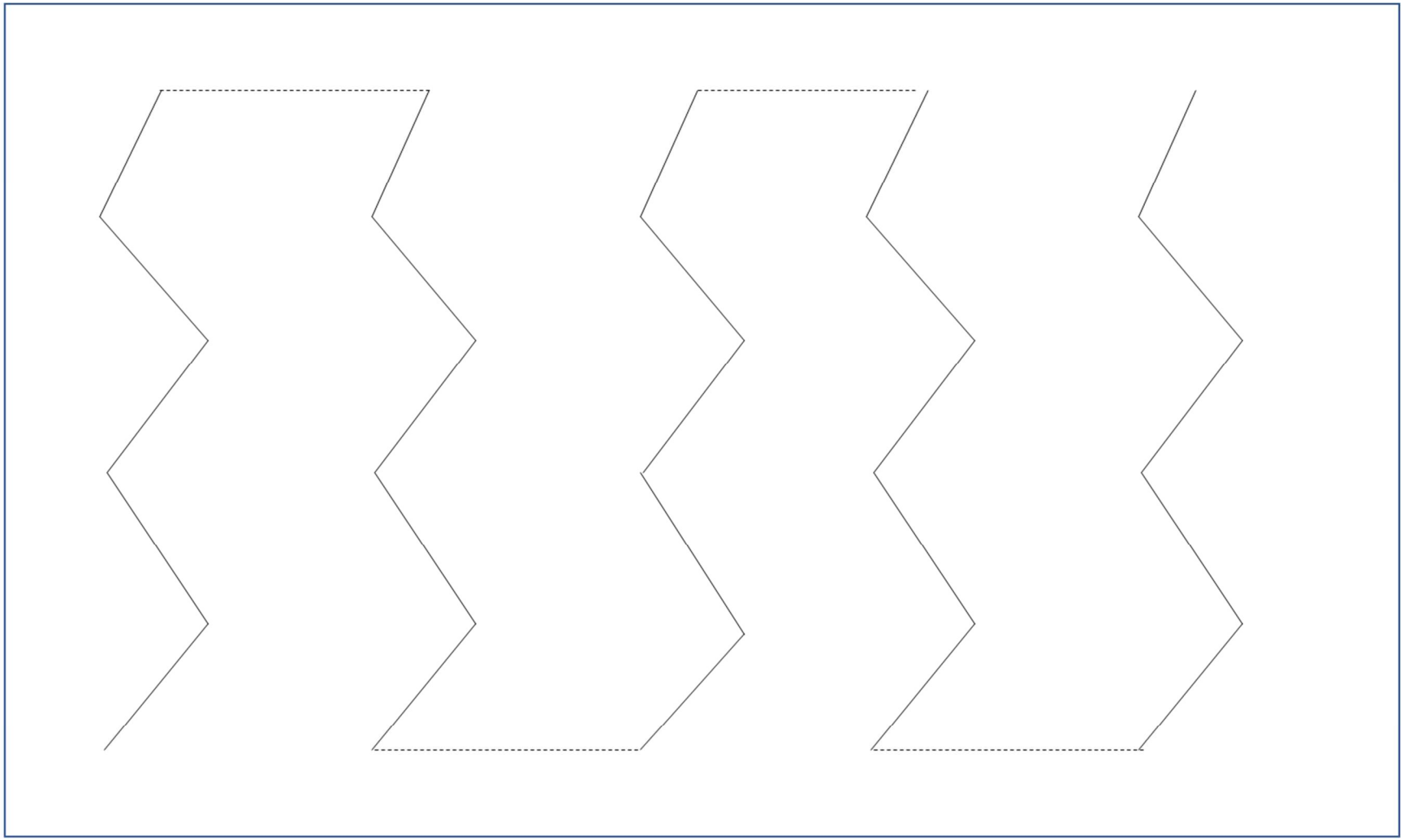

Figure 2- Sampling pattern for research areas/subplots of a shape similar to a rectangle

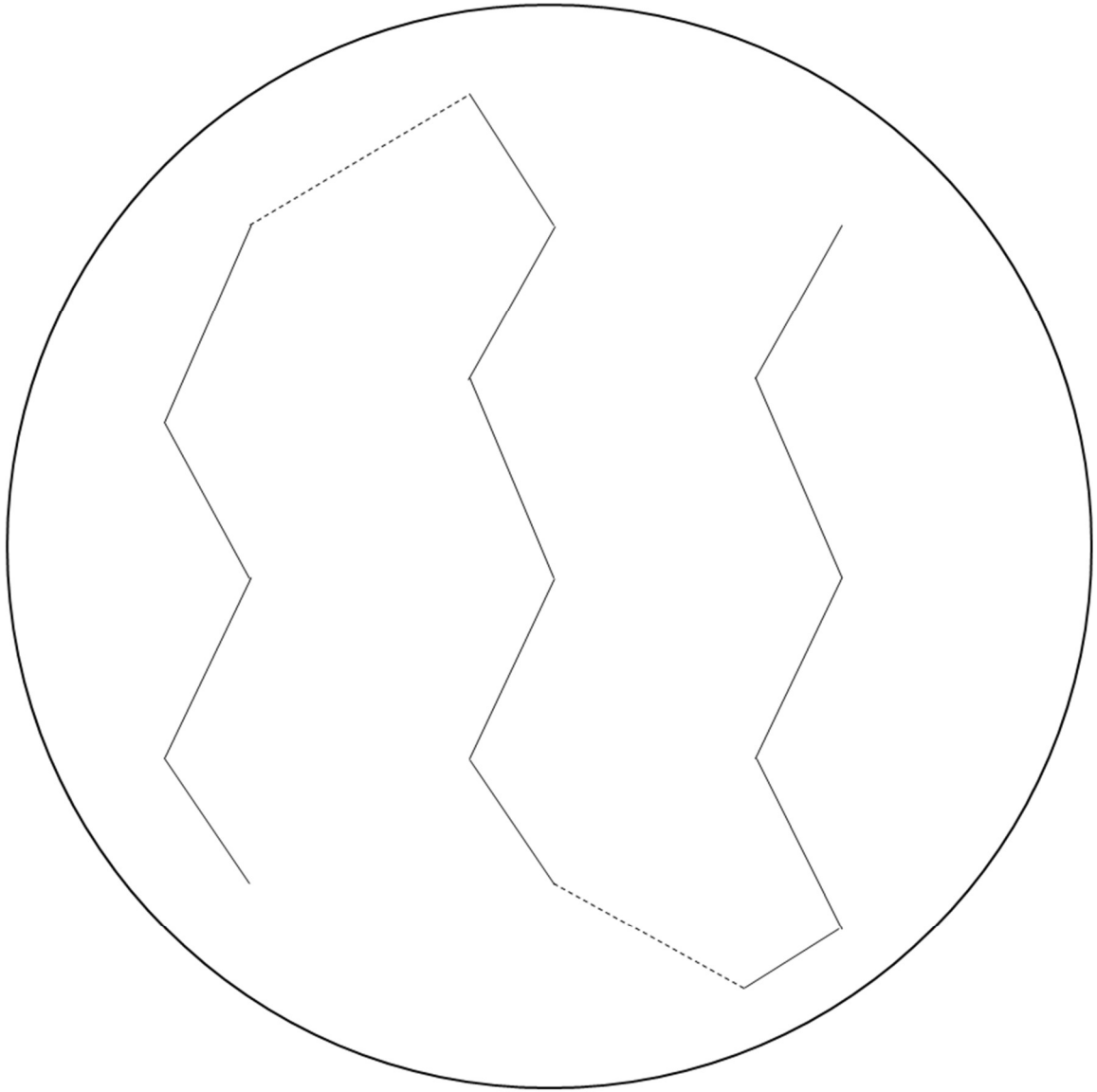

Figure 3- Sampling pattern for research areas/subplots of the shape similar to a circle or oval

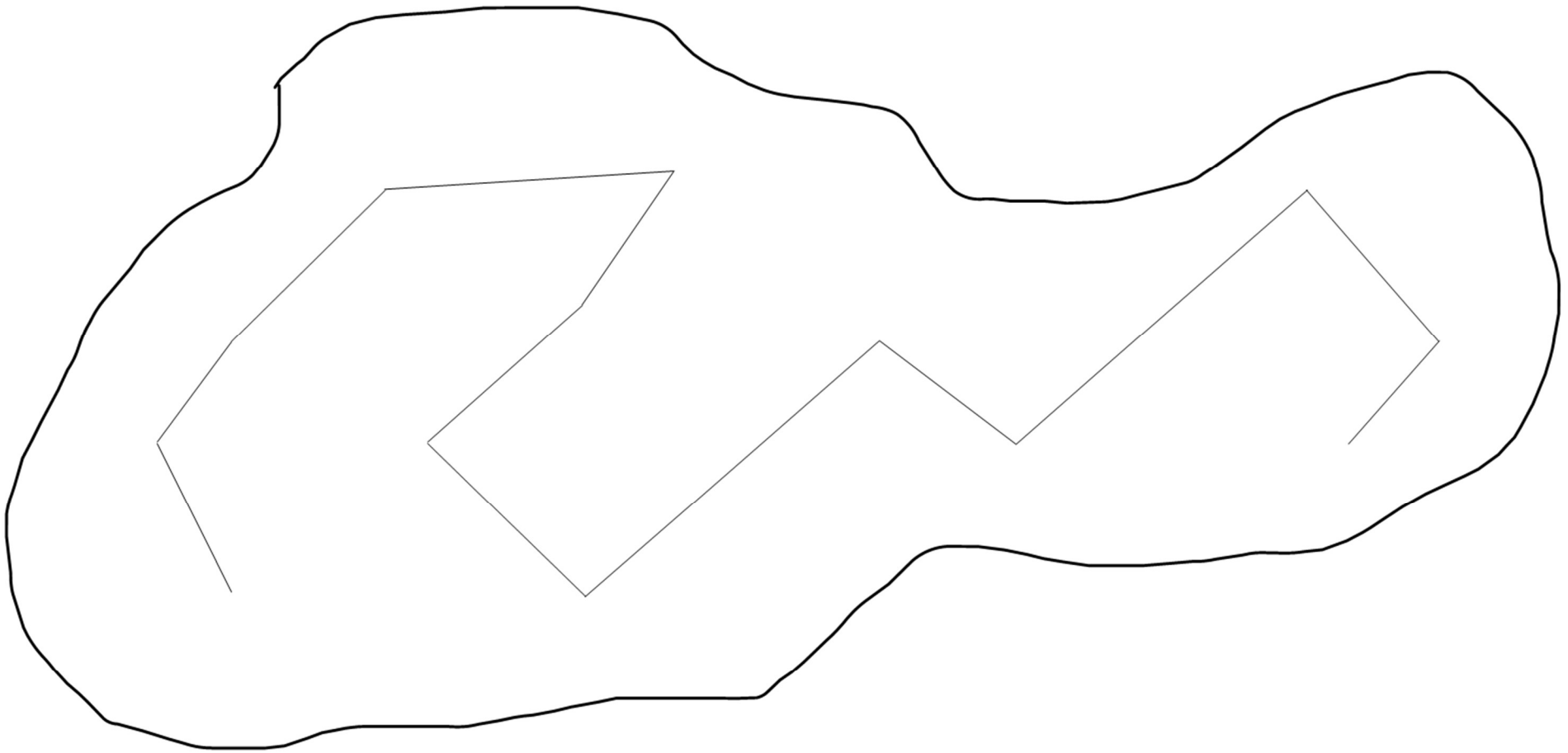

Figure 4 - Sampling pattern for research areas/subplots of an irregular shape