INFORMATIVE ACHENES



Possibly full: Achenes vary in color and size. These, and all other four-sided achenes, are disc achenes found on the sides and top of the seed head.



Apparently empty: Some intact achenes may appear small, shriveled, black, or flat. Even though they seem empty, we still analyze them to calculate seed set.

UNINFORMATIVE ACHENES



Broken or crushed: Broken during cleaning. They may or may not have contained a seed.



Tiny: Aborted achenes that never fully developed. Florets cannot be removed without breaking the achene.



False tiny achenes. These are small informative achenes with florets still attached. They can easily be confused with tinies, except that their florets are detachable and their coloration is often lighter.



Ray: Sterile three-sided achenes found on the bottom ring of the head; most have pointed ends.



Top view of a ray achene (left) and a disc achene (right).



Hole: Eaten by a critter. There may be holes, powdery waste, frass, or chewed-off bottoms (and maybe the critters themselves!).

Images approximately to scale