

# POACEAE [GRAMINEAE] – GRASS FAMILY

**Plant:** annuals or perennials

**Stem:** jointed stem is termed a culm – internodial stem most often hollow but always solid at node, mostly round, some with stolons (creeping stem) or rhizomes (underground stem)

**Root:** usually fibrous, often very abundant and dense

**Leaves:** mostly linear, sessile, parallel veins, in 2 ranks (vertical rows), leaf sheath usually open or split and often overlapping, but may be closed

**Flowers:** small in 2 rows forming a spikelet (1 to several flowers), may be 1 to many spikelets with pedicels or sessile to stem; each flower within a spikelet is between an outer lemma (bract, with a midrib) and an inner palea (bract, 2-nerved or keeled usually) – these 3 parts together make the floret – the 2 bottom bracts of the spikelet do not have flowers and are termed glumes (may be reduced or absent), the rachilla is the axis that hold the florets; sepals and petals absent; 1-6 but often 3 stamens; 1 pistil, 1-3 but usually 2 styles, ovary superior, 1 ovule – there are exceptions to most everything!!

**Fruit:** seed-like grain (seed usually fused to the pericarp (ovary wall) or not)

**Other:** very large and important family; Monocotyledons Group

**Genera:** 600+ genera; locally many genera

2 slides per species

# POACEAE [GRAMINEAE] – STIPEAE TRIBE

Shortbristle Needle and Thread; *Hesperostipa curtiseta* (Hitcch.) Barkworth

# Shortbristle Needle and Thread – p1



*Hesperostipa curtisetata* (Hitchc.) Barkworth

Poaceae (Grass Family); Stipeae (Tribe)

Near Greers Ferry Lake, Cleburne County, Arkansas

Notes: plant perennial, culms to 65+ cm (or longer), lower nodes mostly glabrous; roots fibrous with fine rhizomes; leaf sheath without auricles, ligules membranous, 1-3 mm; leaves narrow (up to 3+ mm); inflorescence an open panicle, up to 20+ cm; spikelets of 1 perfect floret (up to 17 mm in length); glumes subequal with upper glume a little longer than the lemma, lemma with brown hairs at base, awns from 50-100+ mm; (see photos on P2 for details); grasslands; spring (ID problematic, not reported in USDA or FNA in Arkansas, *H. spartea* would be expected but floret size is too small?)

[V Max Brown, 2015]



# Shortbristle Needle and Thread – p2

*Hesperostipa curtiseta* (Hitchc.) Barkwort  
[V Max Brown, 2015]



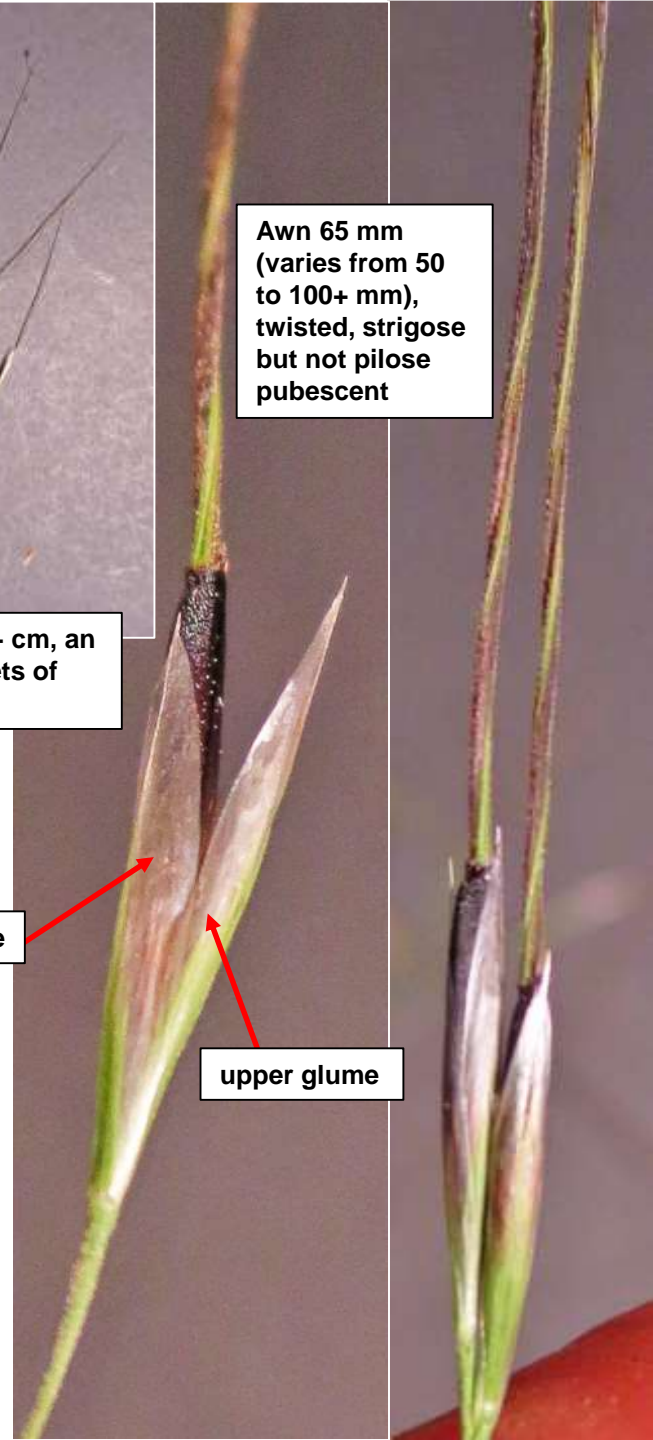
lemma

Floret here about 10 mm in length

Brown hairs at maturity near base



Inflorescence up to 14+ cm, an open panicle or spikelets of single florets



Awn 65 mm (varies from 50 to 100+ mm), twisted, strigose but not pilose pubescent

Lower glume

upper glume