

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PMPOA50020

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Polypogon elongatus*

**COMMON NAME:** American Rabbitfoot Grass, Streambank Rabbits'-foot Grass

**SYNONYMS:** *Alopecurus elongatus*, *Chaetotropis elongata*, *Nowodworskya agrostoides*, *Polypogon inaequalis*, *Polypogon intermedius*, *Polypogon mexicanus*, *Raspailia agrostoides*, *Chaetotropis elongata* var. *elongata*, *Chaetotropis elongata* var. *longearistata*, *Polypogon elongatus* var. *strictus*.

**FAMILY:** Poaceae

**AUTHOR, PLACE OF PUBLICATION:** Kunth, Karl (Carl) Sigismund. Nova Genera et Species Plantarum (quarto ed.) 1: 134-135. 1815[1816].

**TYPE LOCALITY:** Ecuador: Pichincha. Crecit in temperatus regni Quitensis prope Chillo, alt. 1350 hexap., floret Aprili.

**TYPE SPECIMEN:** Museum National d'Histoire Naturelle, Paris. P 669393 (holotype). Humboldt and Bonpland (SN). No date.

**TAXONOMIC UNIQUENESS:** There are six species of *Polypogon* in the U.S., and five of these occur within Arizona: *P. australis*, *P. elongatus*, *P. interruptus*, *P. monspeliensis*, and *P. viridis*. Barkworth et al 2007 recognize eight species in North America but only one, *P. interruptus*, is native.

**DESCRIPTION:** **HABIT** Perennial; caespitose. Culms erect, or geniculately ascending; 60–100 cm long; 1–3 mm diam. Culm-nodes constricted; brown. Ligule an eciliate membrane; 4–8 mm long; lacerate. Leaf-blades 15–30 cm long; 4–15 mm wide. **INFLORESCENCE** Inflorescence a panicle. Peduncle 10–30 cm long; glabrous. Panicle contracted; lanceolate, or elliptic; 10–30 cm long; 1–7 cm wide. Panicle branches scabrous. Spikelets solitary. Fertile spikelets pedicelled. Pedicels filiform; 3–5 mm long; scabrous. **FERTILE SPIKELETS** Spikelets comprising 1 fertile florets; without rhachilla extension. Spikelets cuneate; laterally compressed; 2–3 mm long; falling entire; deciduous with the pedicel. Floret callus glabrous. **GLUMES** Glumes similar; exceeding apex of florets; firmer than fertile lemma; gaping. Lower glume lanceolate; 2–3 mm long; 1 length of upper glume; membranous; 1-keeled; 1 -veined. Lower glume lateral veins absent. Lower glume surface scabrous. Lower glume apex attenuate; awned; 1 -awned. Lower glume awn 1–2 mm long. Upper glume lanceolate; 2–3 mm long; 2–3 length of adjacent fertile lemma; membranous; 1-keeled; 1 -veined. Upper glume lateral veins absent. Upper glume surface scabrous. Upper glume apex attenuate; awned; 1 -awned. Upper glume awn 1–2 mm long. **FLORETS** Fertile lemma ovate; 1–1.5

mm long; membranous; without keel; 5 -veined. Lemma lateral veins excurrent. Lemma apex dentate; 4 -fid; truncate; awned; 1 -awned. Principal lemma awn from a sinus; 1.2–2 mm long overall. Palea 0.33–0.5 length of lemma; hyaline; 0 -veined. **FLOWER** Lodicules 2; membranous. Anthers 3; 0.5–0.7 mm long; yellow. **FRUIT** Caryopsis with adherent pericarp. (Kew 2014).

**AIDS TO IDENTIFICATION:** According to Barkworth et al 2007, *P. elongatus* is distinguished from the other *Polypogon* species by the following criteria:

1. Glumes with awns 3-12mm long ... (*P. australis*, *P. interruptus*-in part, *P. monspeliensis*)
- 1'. Glumes unawned or with awns to 3.2mm long.
  2. Glumes unawned.....*P. viridis*
  - 2'. Glumes awned, the awns 3.2mm long
    3. Stipes 1.5-2.5mm long, glumes tapering from about midlength to the acute, unlobed apices.....*P. elongatus*
    4. Stipes less than 1.5mm long; lemmas 0.7-1.5mm long; paleas from  $\frac{3}{4}$  as long to equaling the lemmas; glumes of each spikelet subequal to equal; plants perennial.....*P. interruptus*- in part

**ILLUSTRATIONS:**

Photos, Herbarium Mounts: <http://swbiodiversity.org/seinet/taxa/index.php?taxon=Polypogonelongatus>.

**TOTAL RANGE:** Arizona, reported from California, Colorado and Texas, south through Mexico, Central American and mostly western and southern South America. Regarding the species' presence in California, there is some conflict in the literature. Calflora reports that the name was misapplied and that the name *P. elongatus* is not currently active; Barkworth et al 2007 note the species has been introduced and occurs in California. This may be a matter of whether the species is considered a native plant or not.

**RANGE WITHIN ARIZONA:** *Polypogon elongatus* is only known in Arizona from a single locality: Madera Canyon in the Santa Rita Mountains south of Tucson. The series of collections from 1881 to 1968 overlap into both Pima and Santa Cruz Counties.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** A tall, perennial grass.

**PHENOLOGY:** Fruits have been collected in Arizona from July-September.

**BIOLOGY:** Native from Mexico to Argentina. A warm-temperature grass. Introduced to Arizona.

**HABITAT:** Riparian situations, other moist to wet habitats such as canal banks. Considered an obligate wetland species by the USDA.

**ELEVATION:** In Arizona, from 4500 – 5200 feet (1370-1585m).

**EXPOSURE:** Apparently an understory species in riparian communities. May also tolerate more open exposures along canals.

**SUBSTRATE:** Moist to wet soils.

**PLANT COMMUNITY:** Oak-Sycamore and Oak-Juniper riparian communities in Arizona.

**POPULATION HISTORY AND TRENDS:** Unknown, and even unknown whether still extant in Arizona. Between 1881 and 1968, *P. elongatus* was collected four times in the State, all from Madera Canyon. None of the collection records recorded any information on populations.

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None.

**STATE STATUS:** None.

**OTHER STATUS:** None.

**MANAGEMENT FACTORS:** None specified.

**PROTECTIVE MEASURES TAKEN:** None. Most of the known distribution area is within a canyon riparian situated in Coronado National Forest, and therefore has a certain *de facto* protection.

**SUGGESTED PROJECTS:** The known collection area, along the Madera Canyon riparian zone between 4500 – 5200 feet (1370-1585m) should be re-surveyed to determine whether the species is still extant in Arizona. It has not been recorded since 1968.

**LAND MANAGEMENT/OWNERSHIP:** USDA Forest Service, Coronado National Forest (Santa Rita Mountains). Some private land holdings are also included within the collection area.

### **SOURCES OF FURTHER INFORMATION**

**REFERENCES:**

- Barkworth, M.E., Laurel K. Anderton, Kathleen M. Carpels, Sandy Long, and Michael B. Piep. 2007. Manual of Grasses for North America. Intermountain Herbarium and Utah State Univ. Press, Logan, Utah. Pp. 154-155.
- Calflora, accessed 7/25/2014, [http://www.calflora.org/cgi-bin/species\\_query.cgi?where-taxon=Polypogon+elongatus](http://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Polypogon+elongatus).
- Kew Royal Botanical Gardens, accessed 7/25/2014, <http://www.kew.org/data/grasses-db/www/imp08634.htm>.
- Tropicos, accessed 7/25/2014, <http://www.tropicos.org/Name/25512439>.
- USDA-NCRS, Plants Database, accessed 7/28/2014, <http://plants.usda.gov/core/profile?symbol=POEL>.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:****ADDITIONAL INFORMATION:**

**Revised:** 2014-07-28 BDT

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