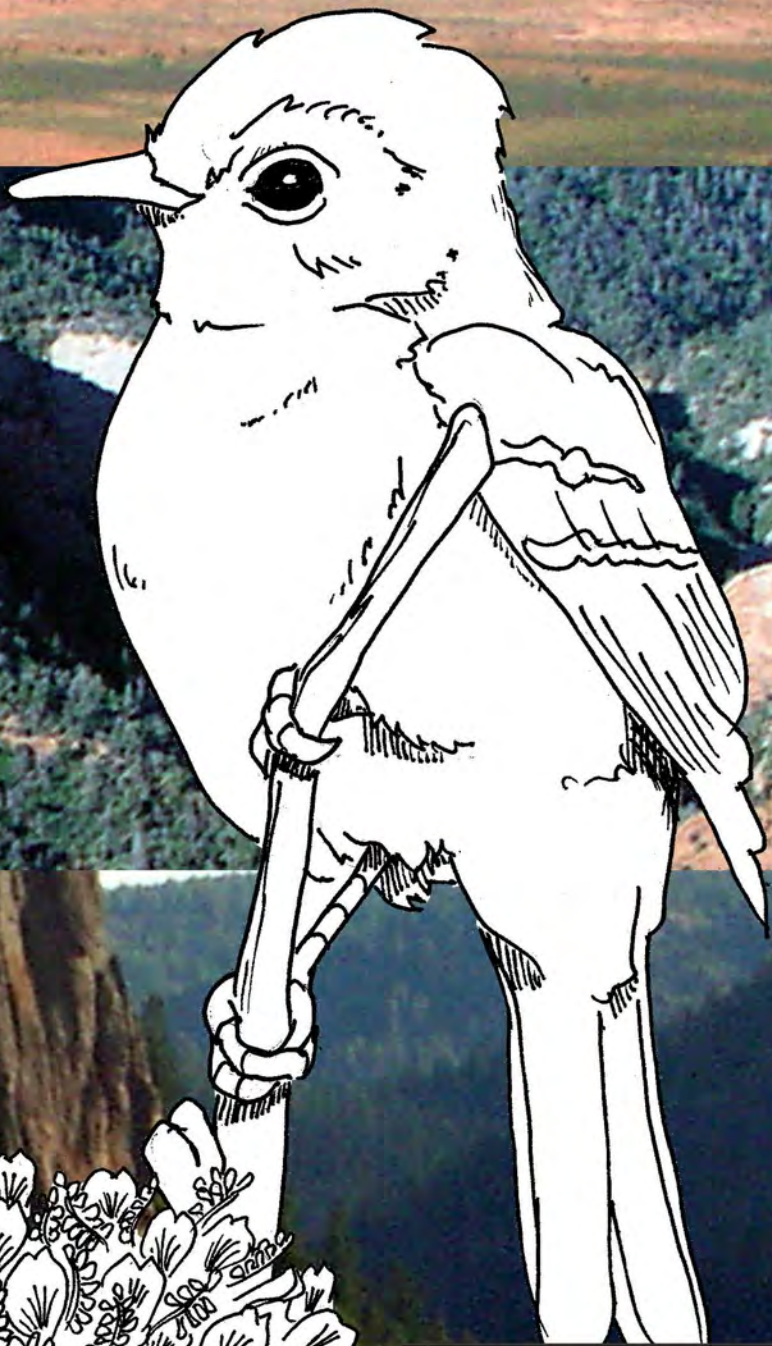


NAVAJO ENDANGERED SPECIES LIST

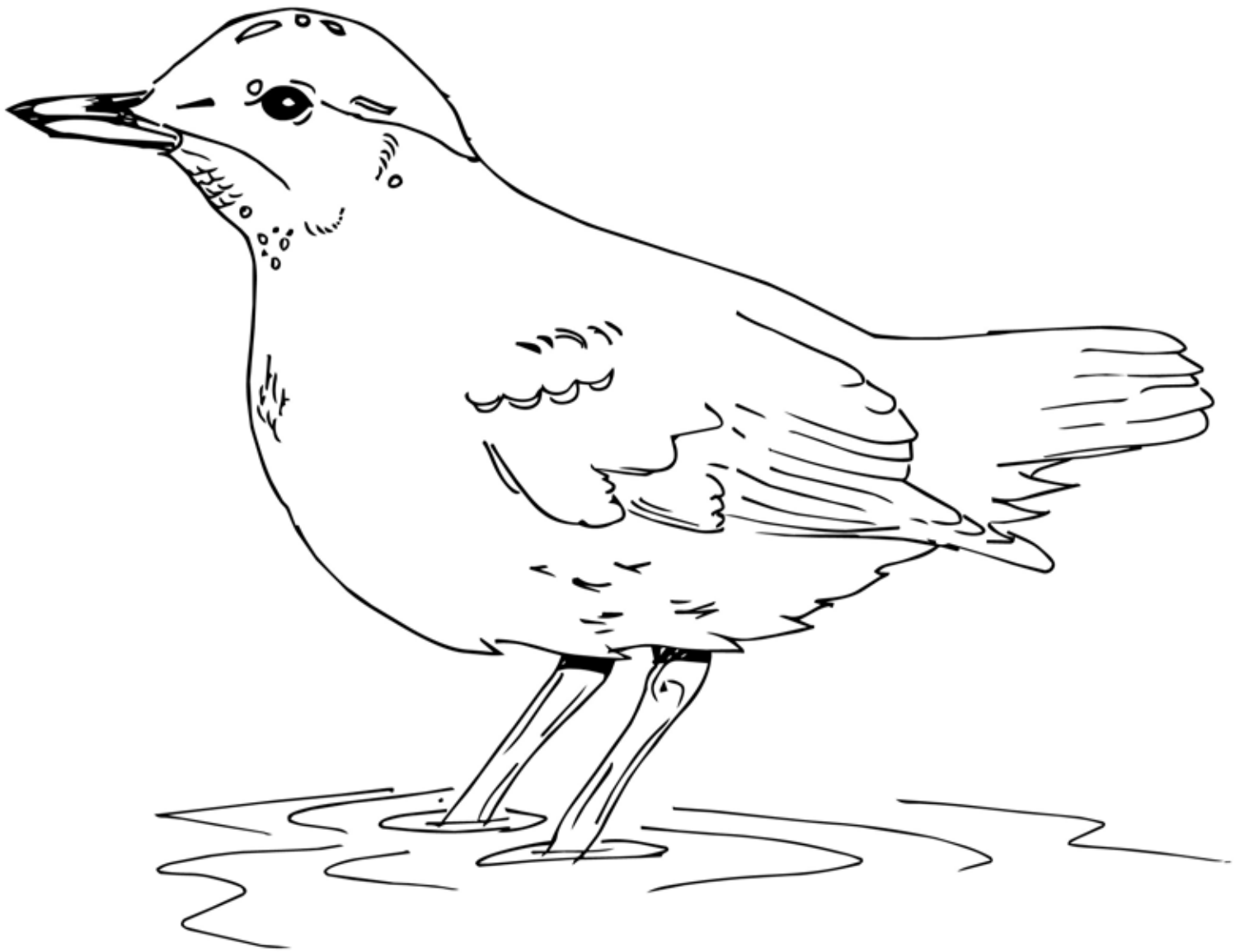


NNHP
Navajo Natural Heritage Program



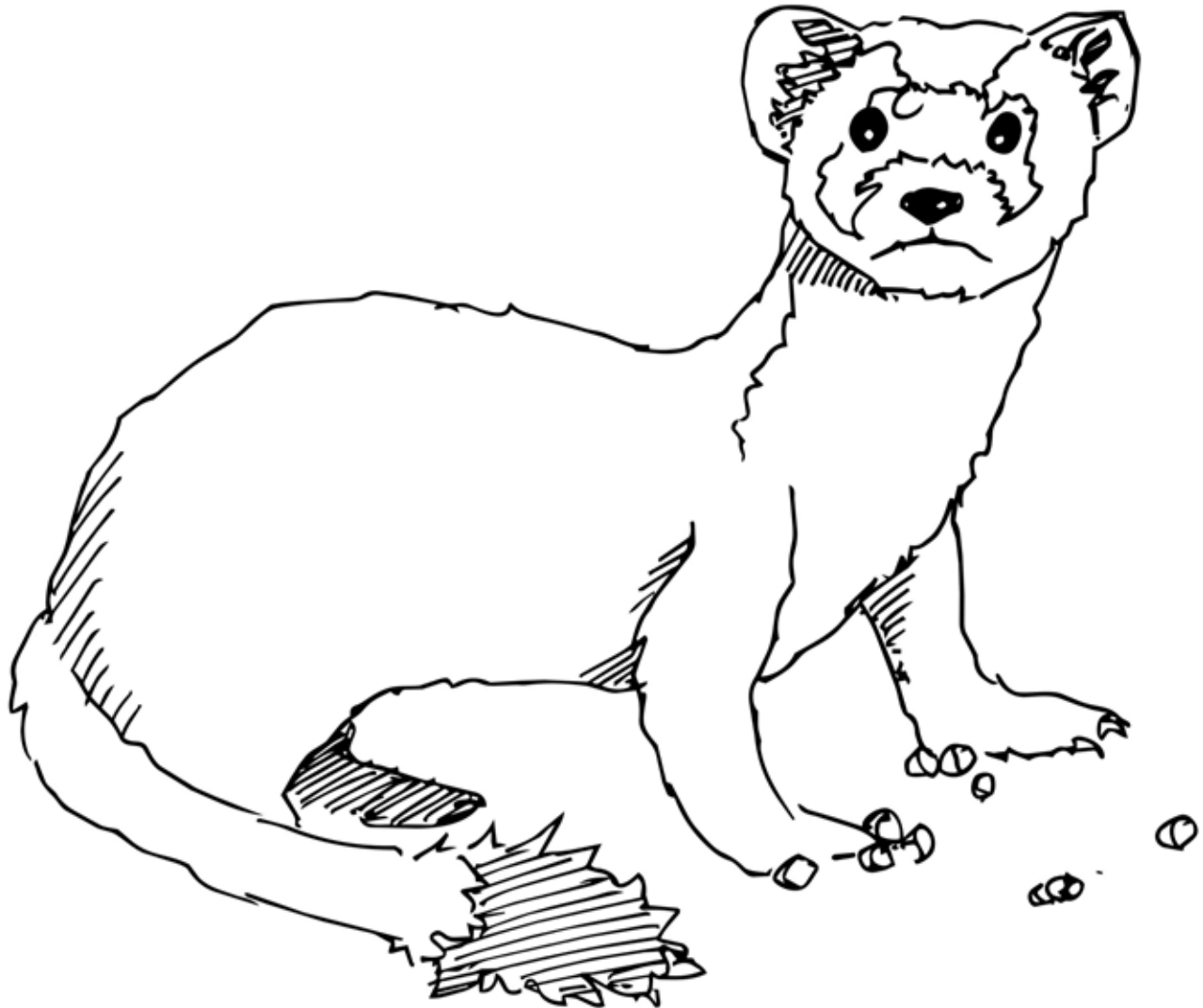
Alcove Death Camus (*Anticlea vaginata*)

Habitat: Hanging gardens in seeps and alcoves, mostly on Navajo Sandstone, 3700 - 6700ft.



American Dipper (*Cinclus mexicanus*)

Habitat: Nests near clear, unpolluted streams usually < 15 m in width and < 2 m in depth, with a variety of riffles, pools, and waterfalls with substrate of rocks, sand, and rubble; instream and streamside boulders are necessary for perches. Nests are placed on ledges or in crevices on stream-bank structures of small cliffs, large rocks, fallen logs and tree roots. Streams used in winter may be larger and deeper, but lack of ice is major selection factor.



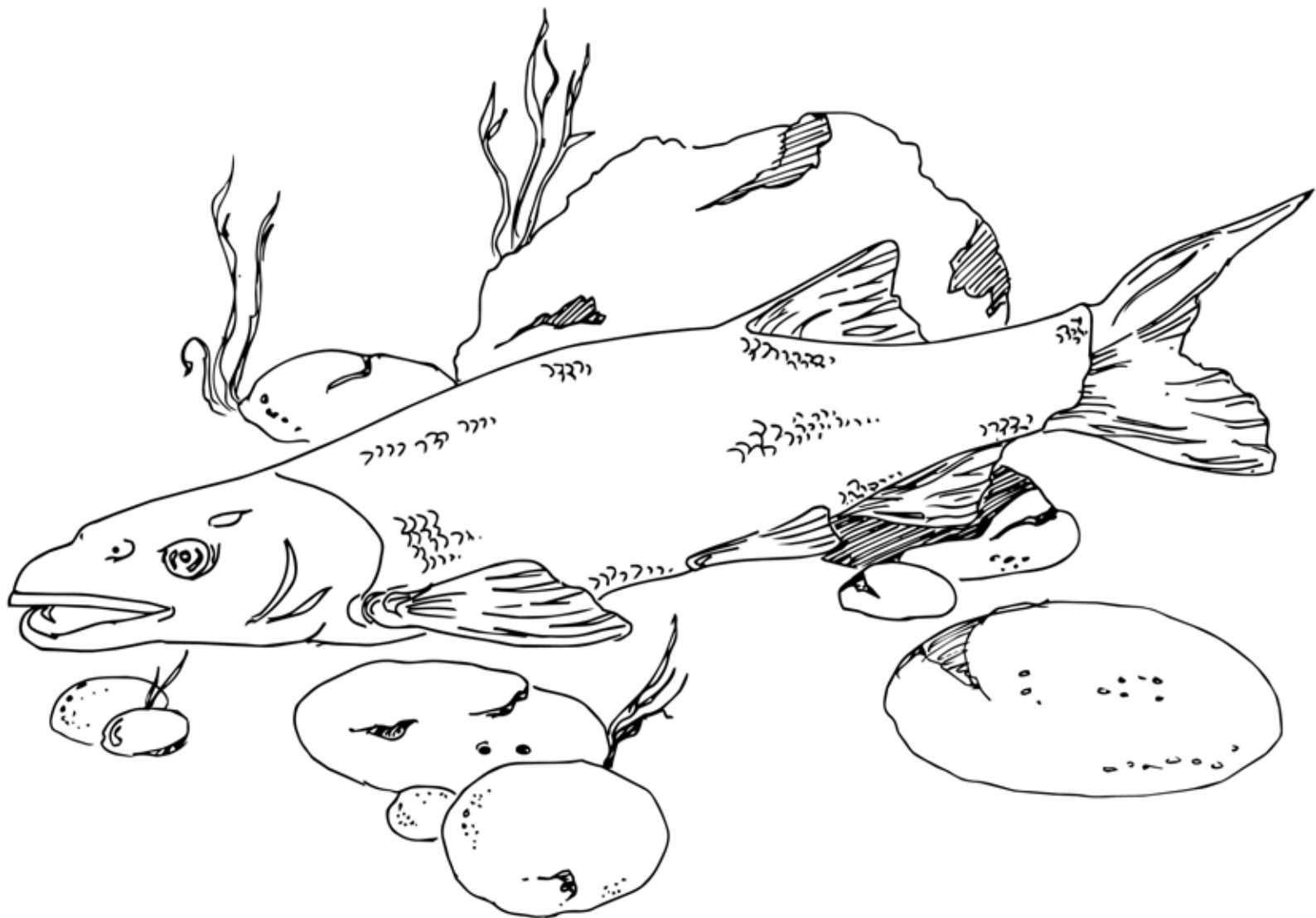
Black-footed Ferret (*Mustela nigripes*)

Habitat: Medium to large active prairie dog towns (>80 ha, and > 20 burrows/ha) or complex of towns (two or more towns within 7 km). Prairie dogs are their main food source, and burrows are used for denning and rearing young. On the Navajo Nation, prairie dogs occupy extensive areas in low- to mid- elevation (1200-2000 m), plains and desert grassland and desert scrub habitats, and are recognized by clusters of burrows (10-15 cm dia.) with associated dirt mounds (approx. 60 cm dia., 10-20 cm height).



Brady Pincushion Cactus (*Pediocactus bradyi*)

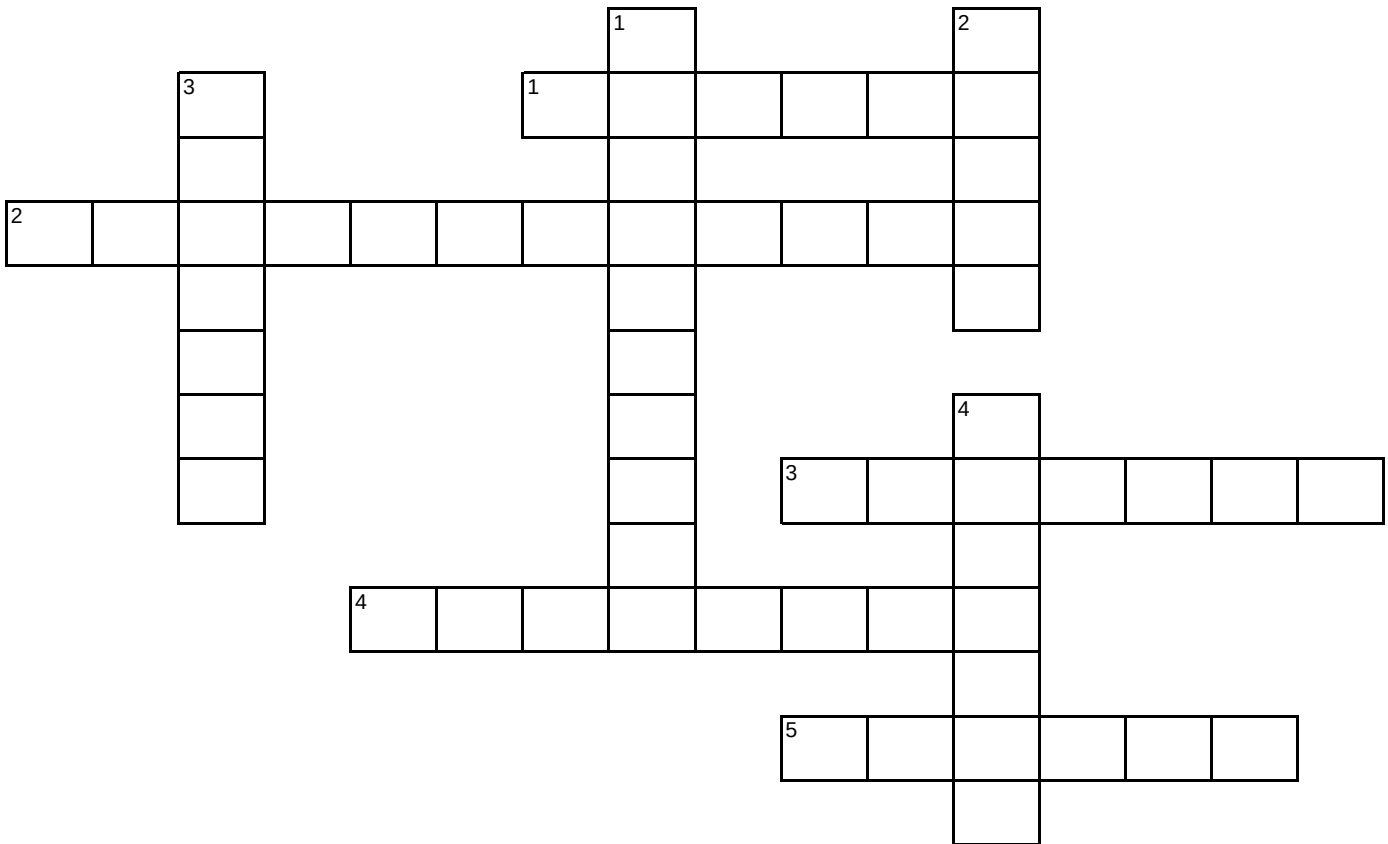
Habitat: Kaibab limestone chips overlaying soils derived from Moenkopi shale and sandstone. It is typically found on gently sloping benches and terraces with sparse vegetation. Populations are known from 3340-5200 ft elevation.



Colorado Pikeminnow (*Ptychocheilus lucius*)

Habitat: Adults use backwaters and flooded riparian areas during spring runoff, and migrate large distances (15-64 km in the SJR) to spawn in riffle-run areas with cobble/gravel substrates. Post-spawning adults primarily use run habitats, with eddies and slackwater also being important. Young-of-year (<120 mm length) use warm backwaters along shorelines. Deeper backwater areas (>1 m deep at confluence with main channel) are the preferred habitat of young fish into the subadult stage (>3 yrs. age and 200- 400 mm length). Irrigation canals and ponds connected to SJR may be potential habitat

Crossword

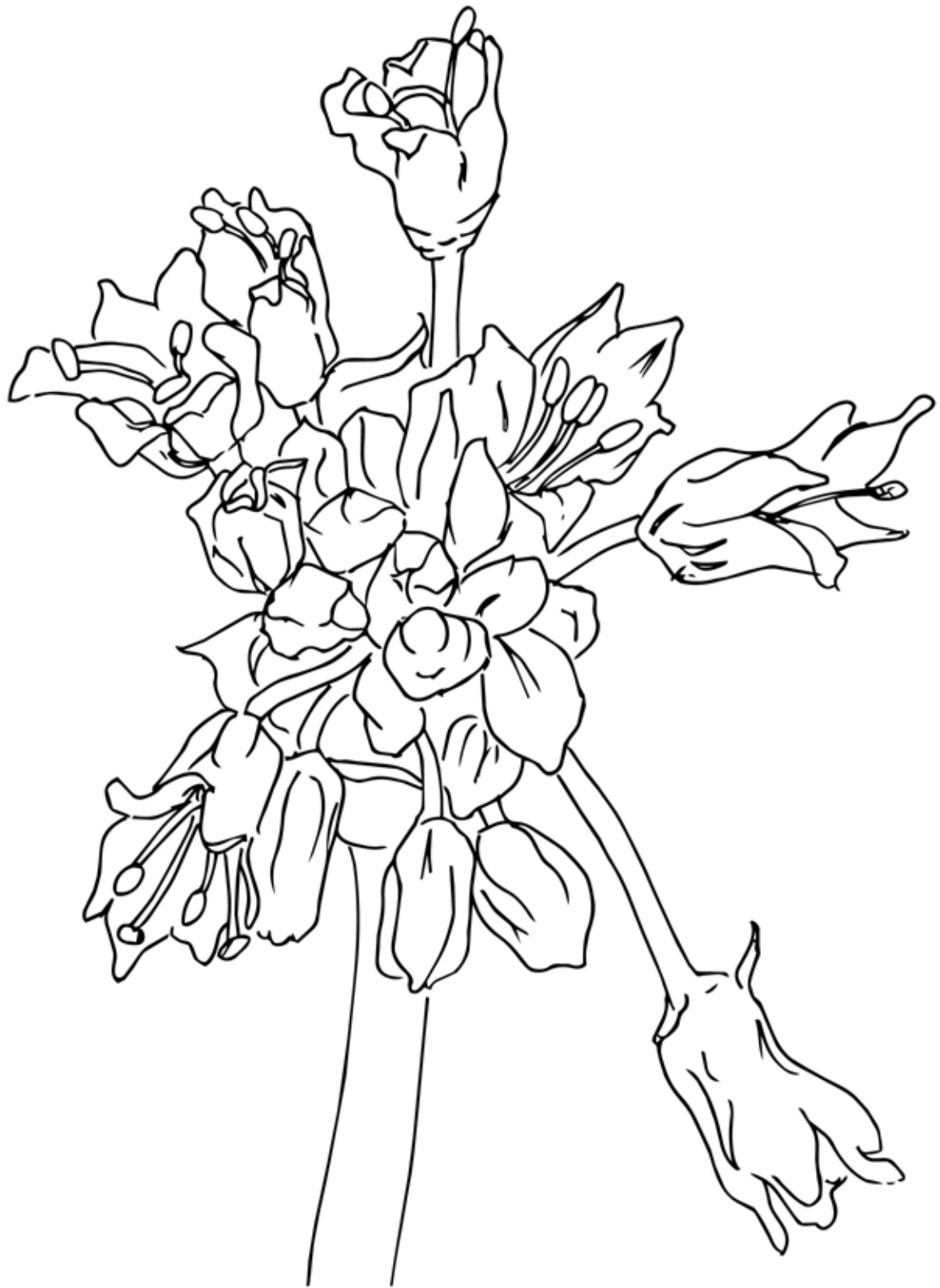


Across

- 1 - Creature that lives in the wild, bear, deer, etc.
- 2 - Careful preservation and protection of something
- 3 - Place or environment where a plant or animal naturally or normally lives and grows
- 4 - Living things and especially mammals, birds, and fishes that are neither human nor domesticated
- 5 - Member of an American Indian people of northern New Mexico and Arizona; Dine

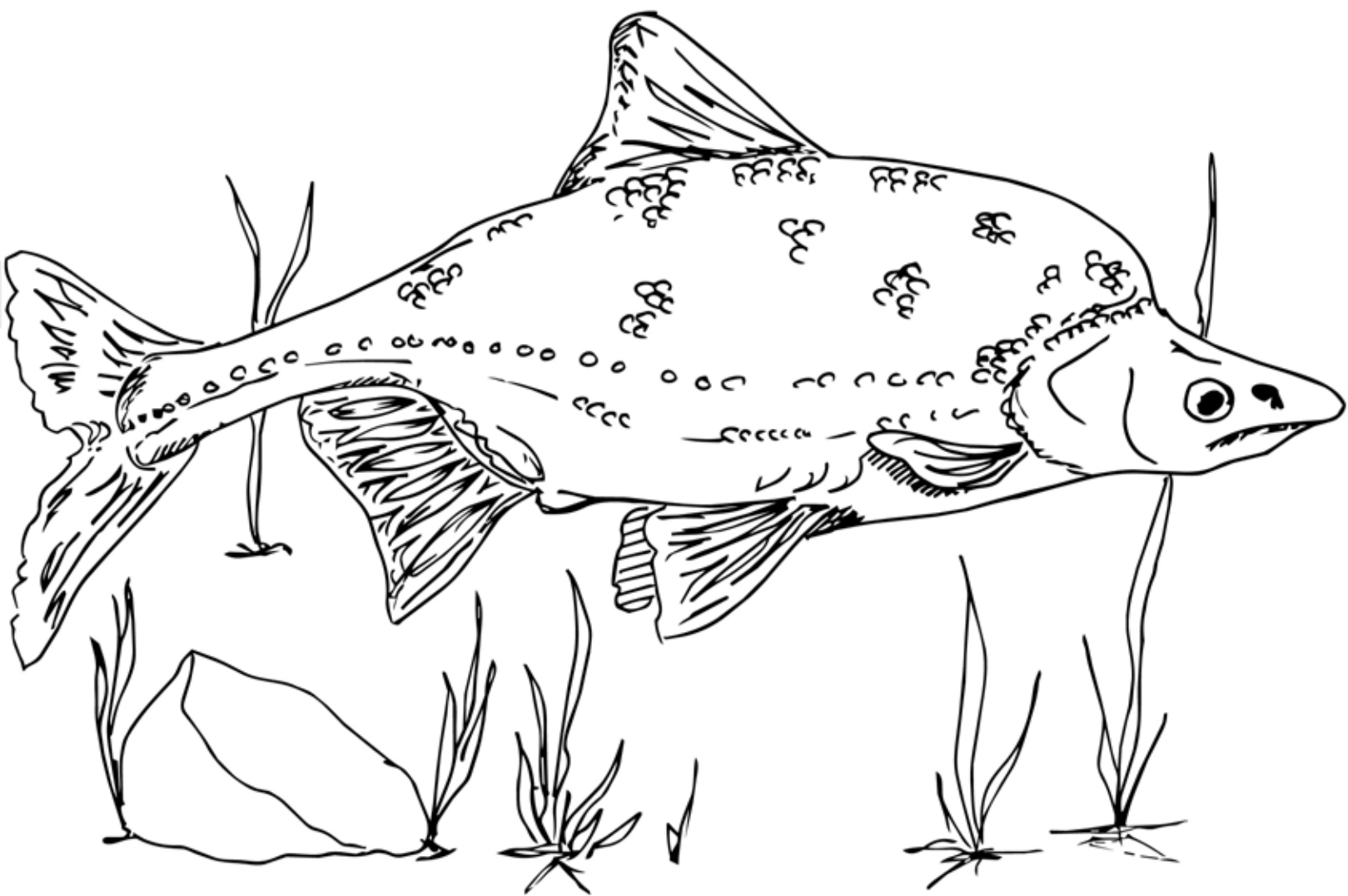
Down

- 1 - Species in peril
- 2 - Organisms that grow out of the ground, often green
- 3 - Watch, keep track of, or check usually for a special purpose
- 4 - Watch carefully especially with attention to details or behavior for the purpose of arriving at a judgment



Gooding's Onion (*Allium gooddingii*)

Habitat: Generally in spruce-fir forests and mixed conifer forests; in the Chuska Mts also under Gambel oak thickets interspersed with aspen, dogwood, and Douglas fir; in moist, shady canyon bottoms and north-facing slopes, often along streams. 6400- 9400 ft elevation.



Humpback Chub (*Gila cypha*)

Habitat: First-year chubs (<65 mm in length) are found in shallow waters along edges of deeper waters. Adults use a variety of habitats including pools, riffles, and eddies; they seem to prefer whitewater reaches with deep, swirling eddies and the turbulent waters near boulders and submerged rocks. Spawning in LCR is thought to occur over gravel beds in swift water.



Mancos Milk-vetch (*Astragalus humillumus*)

Habitat: Forms highly localized populations from 4- 20 acres in size. It is typically found on large, nearly flat sheets of exfoliating whitish-tan colored sandstone, in small depressions and sand filled cracks on or near ledges and mesa tops in slickrock communities of Point Lookout & Cliffhouse Sandstone.



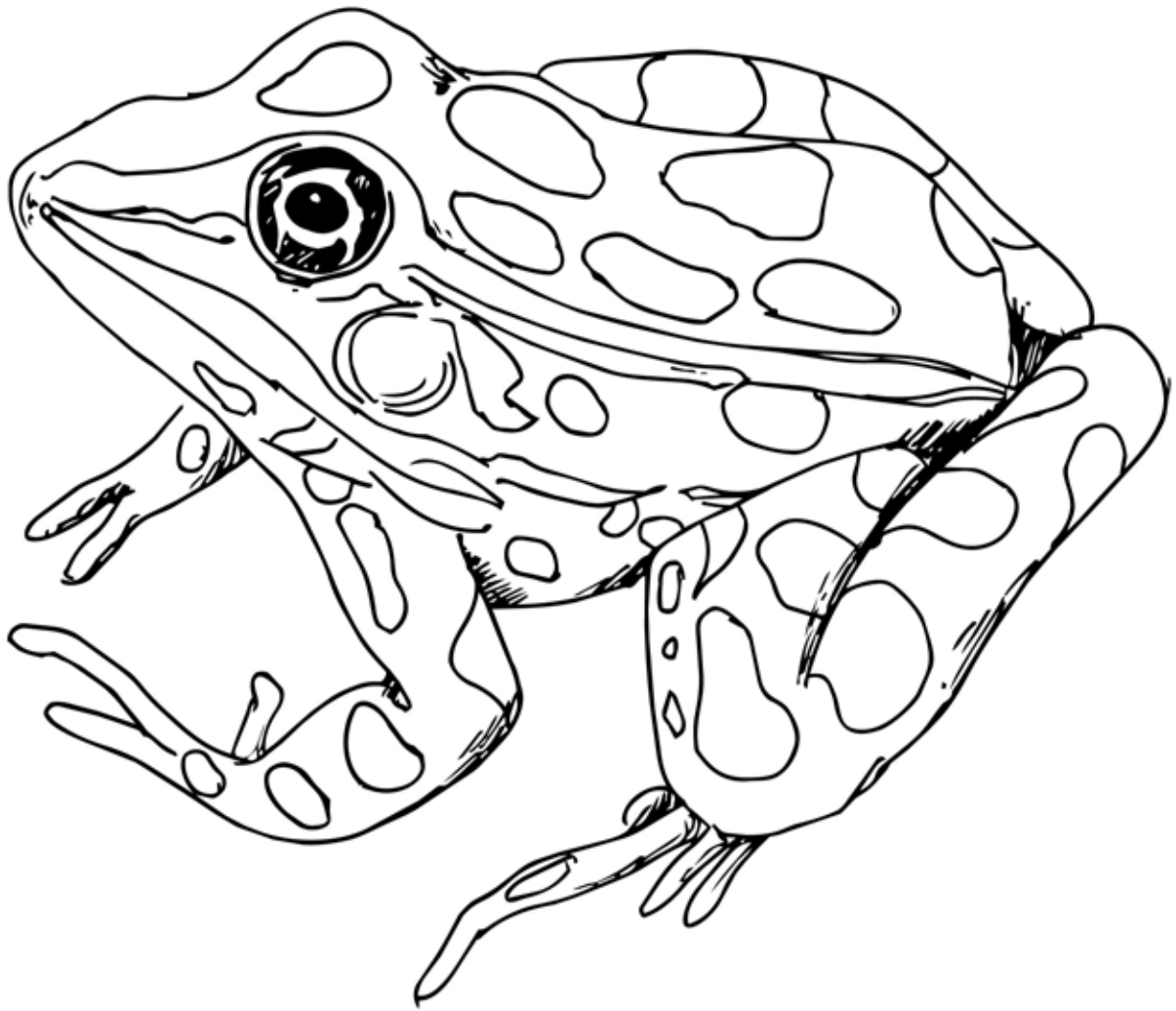
Mesa Verde Cactus (*Sclerocactus mesae-verdae*)

Habitat: Mesa Verde Cactus grows in clay-rich soils derived from the Fruitland and Mancos shale formations. It also grows in Menefee Formation soils near Sheep Springs, NM, but in that case the plant is rooted in Mancos Shale, which closely underlies the soil surface. Soil surfaces within appropriate habitat can have a cover of gravel or cobbles ranging from 0% to 100%. Gravel composition is variable, and can be igneous or sedimentary in origin. The key to appropriate Mesa Verde Cactus habitat seems to be the underlying clay soil, and is independent of any overlying cover of cobbles or gravel. Plants are frequently found on the tops of hills or benches and along slopes. Vegetative cover in Mesa Verde Cactus habitat is low, usually below 15%. The species occurs in salt- desert scrub communities, and is commonly associated with mat saltbush (*Atriplex corrugata*) and Gardner's saltbush (*Atriplex gardneri*). Known populations occur between 4,900 to 5,500ft.



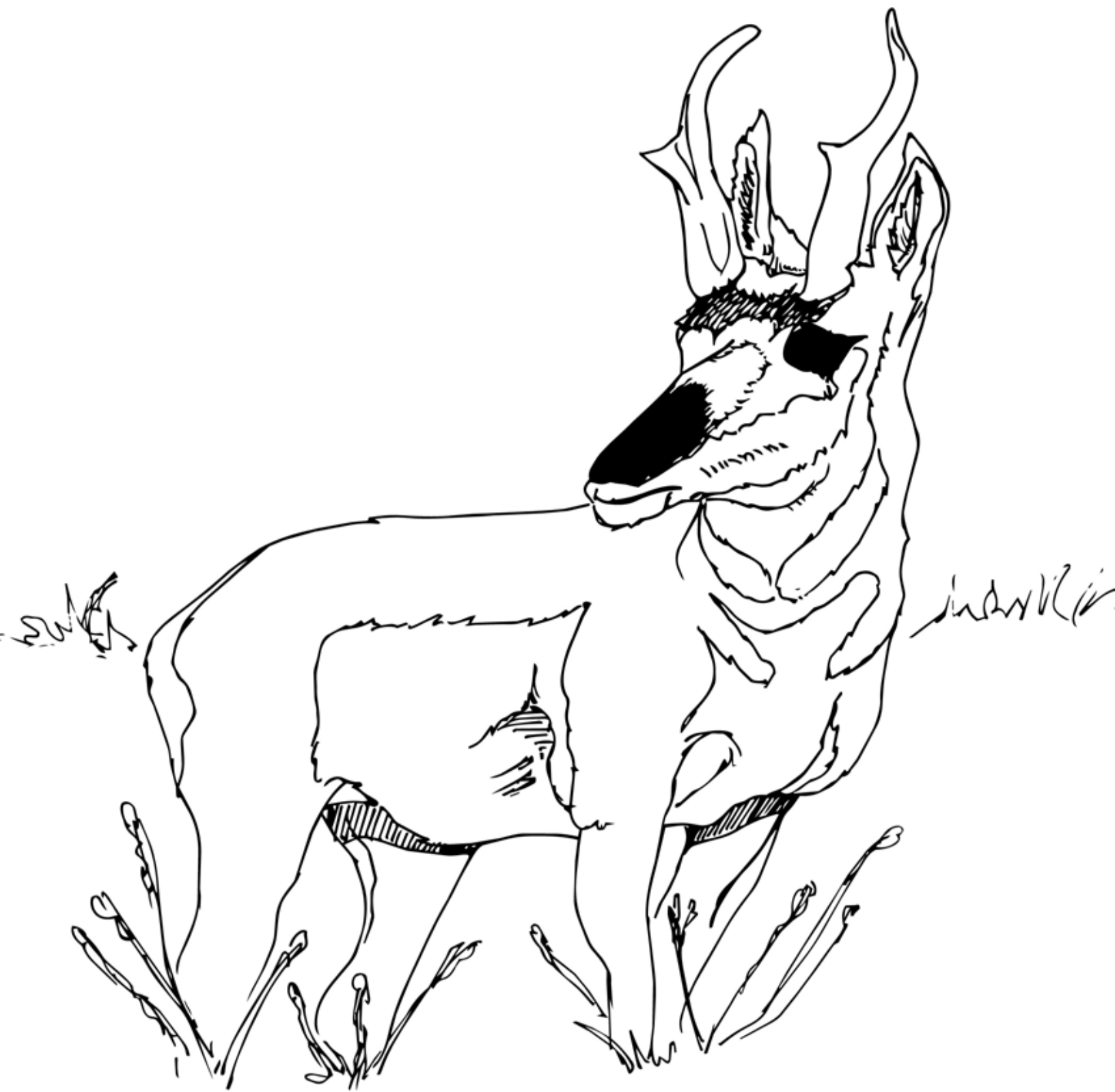
Mexican Spotted Owl (*Strix occidentalis lucida*)

Habitat: Three distinct types: 1) mid-aged to mature mixed-conifer stands dominated by Douglas-fir, typically on mountain slopes, with moderate to dense canopies and multiple canopy layers; and 2) steep-walled, narrow canyons (or side and hanging canyons in wide canyons) often with riparian vegetation and cool microclimates; and 3) moderately sloped drainages with Douglas fir, in pinyon-juniper woodland (eg. Black Mesa). Not known to nest in ponderosa pine-oak forests on Navajo Nation, but will use a variety of habitats, including pinyon-juniper and clearings when foraging.



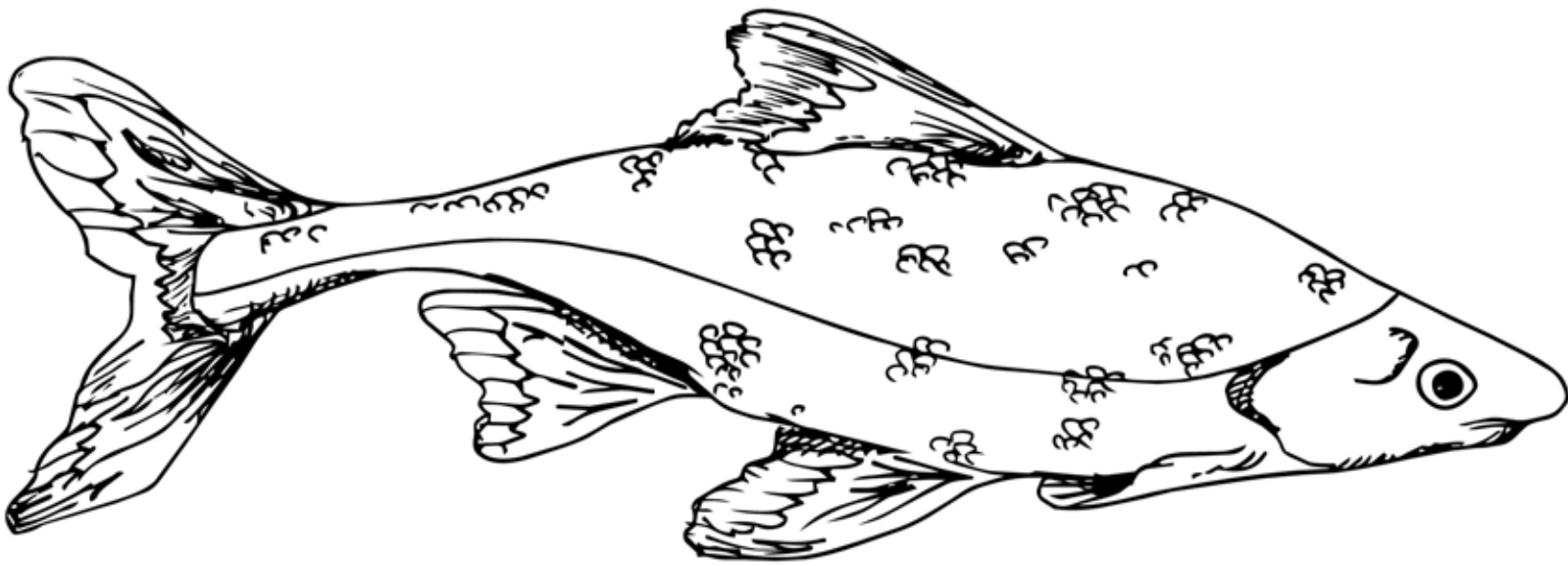
Northern Leopard Frog (*Lithobates pipiens*)

Habitat: Breeds in wetlands usually with permanent water and aquatic vegetation (especially cattails), ranging from irrigation ditches and small streams to rivers, and small ponds and marshes to lakes or reservoirs.



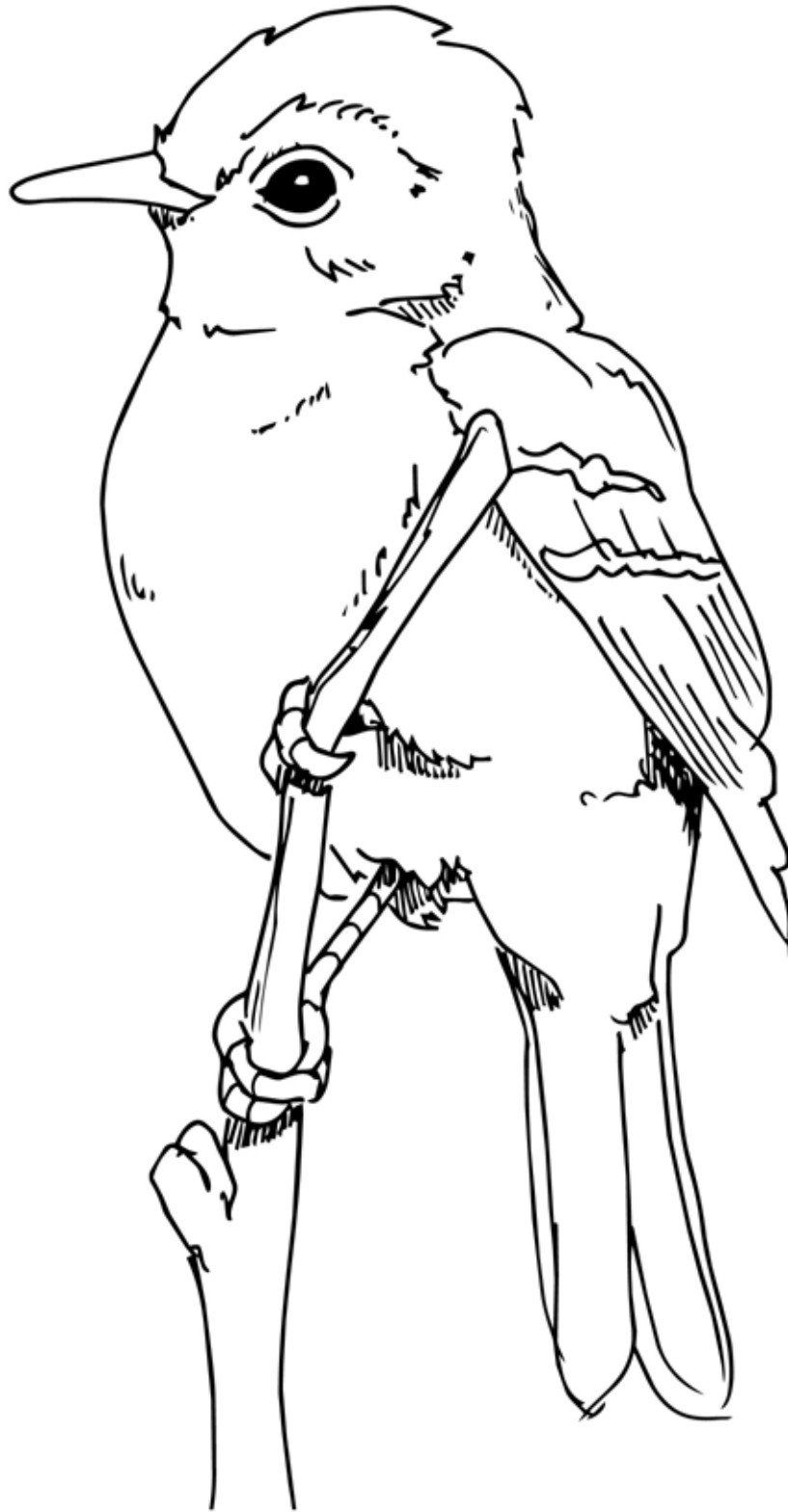
Pronghorn (*Antilocapra americana*)

Habitat: Found in grasslands or desert scrub areas with rolling or dissected hills or small mesas, and usually with scattered shrubs and trees (typically juniper and sagebrush).



Roundtail Chub (*Gila robusta*)

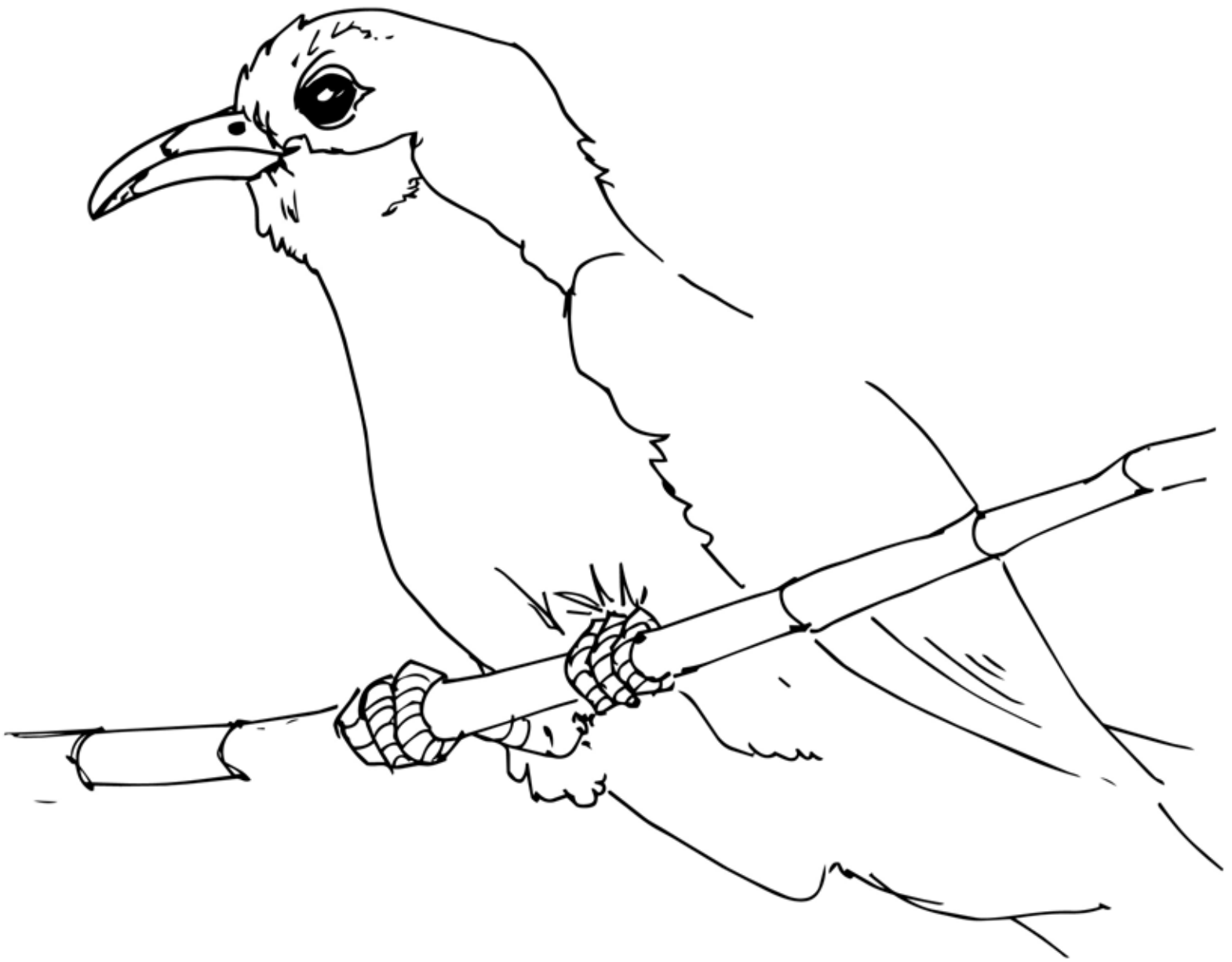
Habitat: Adults inhabit the most permanent water in cool to warm water mid-elevation streams, typically using pools and eddies, adjacent to rapids and boulders. They are often found near cover (e.g. rocks, plant roots) and in pools behind irrigation diversions. Juveniles prefer the margins of flowing water and backwater areas. Spawning occurs over gravel bottoms in runs and pools with > 25 cm water depth.



Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

Habitat: Nesting is in dense riparian vegetation near surface water or saturated soil; either in monotypic or mixed stands of native (e.g. willow) and/or exotic (e.g. tamarisk or Russian olive) species, with or without an over-story. Vegetation is typically > 3 m high, dense (i.e. a thicket) with a closed canopy, although the understory may be dispersed or clumped especially when tamarisk or Russian olive). Nesting habitat greatly varies in size and shape, may be as small as 0.8 ha, but does not include linear riparian zones < 10 m wide.

Migrant flycatchers may use riparian habitats unsuitable for breeding and non-riparian areas



Yellow-billed Cuckoo (*Coccyzus americanus*)

Habitat: Nests within close proximity to water in mature riparian woodlands with dense understories that are, preferably, > 17 ha with a minimum of 3 ha of closed-canopy broad-leaved forest; will also nest in orchards adjacent to river bottoms. Preferred riparian woodlands and nest substrate consists of willow, cottonwood, alder, mesquite, hackberry, soapberry, and cultivated fruit trees.

Word Search

h	s	r	y	s	a	u	h	t	l	a	e	i	c	t	s
t	y	o	w	e	y	u	e	p	i	p	e	a	n	t	r
s	s	t	v	f	u	i	n	u	l	s	d	f	g	j	f
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k	l	h	g	t	y	s	x	c	y	g	e	d	a	e	h

Words

Conservation

Habitat

Navajo

Wildlife

Endangered

Plant

Animal

Observe

Monitor