

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

NEW MEXICO CATTLE GROWERS'  
ASSOCIATION,

*Plaintiff,*

v.

UNITED STATES FISH AND WILDLIFE  
SERVICE, *et al.*,

*Federal Defendants,*

CENTER FOR BIOLOGICAL DIVERSITY;  
MARICOPA AUDUBON SOCIETY,

*Defendant-Intervenors.*

Case No. 21-cv-3263-ACR

**MEMORANDUM OPINION**

This case concerns the southwestern willow flycatcher (*Empidonax traillii extimus*), which Defendant U.S. Fish and Wildlife Service listed as a federally endangered subspecies in 1995. This small bird with a distinctive “fit-za-bew” song can be found—as its name suggests—in the southwestern United States. Plaintiff New Mexico Cattle Growers’ Association, whose members own land in that same area, object to the Service’s listing. Dkt. 25-1 (Mem. Supp. Pl.’s Mot. Summ. J.) at 11–12.<sup>1</sup> Cattle Growers concedes that the Endangered Species Act of 1973 (“the Act” or “ESA”), 16 U.S.C. §§ 1531–1544, protects subspecies. And it concedes that, if it is a valid subspecies, the bird is endangered as the ESA defines that term. It claims, however, that the bird is not a valid willow flycatcher subspecies. This is key because all agree that the broader willow flycatcher species is not endangered. So if the southwestern willow flycatcher is not a valid subspecies, then the ESA does not protect it; if it is a valid subspecies, then it remains protected.

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<sup>1</sup> Citations to ECF documents use the ECF pagination.

Ornithologists have identified and reaffirmed the southwestern willow flycatcher<sup>2</sup> as a valid subspecies since 1948. But, in 2015, an outlier reanalysis of existing data concluded the opposite. Jumping on this potential opening, Cattle Growers petitioned the Service to remove the flycatcher from the endangered species list (“Petition”). The Service did not discard the Petition as strictly for the birds. It instead found that it presented substantial information that delisting may be warranted. And it then undertook a twelve-month review assessing the available science, including the reanalysis cited by Cattle Growers and public comments. The Service denied the Petition (“Denial”), concluding in a ninety-one-page written analysis (“Finding”) that the southwestern willow flycatcher is a valid subspecies.

Cattle Growers then brought this suit claiming that the Service’s Denial violates the ESA and the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 701–706. It contends that the Denial was arbitrary and capricious because the Service did not define “subspecies” or use the best available science. Dkt. 1 (Compl.) at 17–24. The Service counters that it considered the best available science, found that the flycatcher satisfied methods taxonomists use to identify subspecies, and explained its reasoning. Dkt. 26-1 (Mem. Supp. Fed. Defs.’ Cross-Mot. Summ. J.) at 28–30, 36–37. Defendant-Intervenors—the Center for Biological Diversity and the Maricopa Audubon Society—echo the Service. Dkt. 28-1 (Mem. Supp. Intervenors’ Cross-Mot. Summ. J.) at 20–25, 28–35.

Having considered the Administrative Record and Cross-Motions for Summary Judgment, the Court agrees with Defendants. The Court will **DENY** Plaintiff’s Motion for

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<sup>2</sup> To avoid ungainly wording, the Court uses the stand-alone term “flycatcher” to mean the southwestern willow flycatcher.

Summary Judgment, Dkt. 25, and **GRANT** Defendants' Cross-Motions for Summary Judgment, Dkts. 26, 28.

## I. BACKGROUND

### A. The Endangered Species Act

Congress enacted the ESA “to halt and reverse the trend toward species extinction, whatever the cost.” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978); 16 U.S.C. § 1531(b). Under the Act, the Secretary of the Interior must maintain a list of all species she determines to be endangered or threatened. 16 U.S.C. § 1533(c)(1). A species is endangered if it is “in danger of extinction throughout all or a significant portion of its range,” *id.* § 1532(6), and threatened if it is “likely to become an endangered species within the foreseeable future,” *id.* § 1532(20). As relevant here, the Secretary has delegated her responsibility to maintain the endangered species list to the Department of the Interior’s Fish and Wildlife Service. 50 C.F.R. § 402.01(b).

The Act’s definition of “‘species’ includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature.” 16 U.S.C § 1532(16). The Act, however, does not in turn define “subspecies.” Instead, regulations require the Service to “rely on standard taxonomic distinctions and the biological expertise of the Department and the scientific community concerning the relevant taxonomic group” in assessing a subspecies classification. 50 C.F.R. § 424.11(a). By directing “the Service to evaluate the status of not just species, but subspecies and segments,” Congress signaled its “intent to target the Act’s provisions where needed, rather than to require the woodenly undifferentiated treatment of all members of a taxonomic species regardless of how their actual status and condition might change over time.” *Humane Soc’y of the U.S. v. Zinke*, 865 F.3d 585, 598 (D.C. Cir. 2017).

“Interested person[s]” may petition the Service to add or remove species from the list. 16 U.S.C. § 1533(b)(3); *see Am. Wildlands v. Kempthorne*, 478 F. Supp. 2d 92, 94 (D.D.C. 2007), *aff’d*, 530 F.3d 991 (D.C. Cir. 2008). Once an interested party submits a petition to remove a species, a so-called delisting petition, the Service has ninety days to decide “whether the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted.” 16 U.S.C. § 1533(b)(3)(A). If the Service decides that the petition meets that standard, it has twelve months to “review . . . the status of the species concerned” and issue a finding on whether to delist. *Id.* § 1533(b)(3)(B).

To resolve a petition, the Service first “define[s] the species so the agency can estimate its population.” *Am. Wildlands v. Kempthorne*, 530 F.3d 991, 994 (D.C. Cir. 2008). Next, the Service weighs five factors: (1) “the present or threatened destruction, modification, or curtailment of [the species’] habitat or range”; (2) “overutilization for commercial, recreational, scientific, or educational purposes”; (3) “disease or predation”; (4) “the inadequacy of existing regulatory mechanisms”; and (5) “other natural or manmade factors affecting its continued existence.” 16 U.S.C. § 1533(a)(1); *Am. Wildlands*, 478 F. Supp. 2d at 94. The Service must use “the best scientific and commercial data available.” 16 U.S.C. § 1533(b)(1)(A). And because the listing decision “is a biological, not an economic, question,” it “must be made without reference to economic costs or private property impacts.” *Safari Club Int’l v. Jewell*, 960 F. Supp. 2d 17, 30 (D.D.C. 2013) (cleaned up) (citing authorities).

Listing a species triggers a series of protective measures designed to restore the species to a healthy population level. These protections include the designation and acquisition of critical habitat, 16 U.S.C. §§ 1533(b)(6)(C), 1534; prohibitions on taking, killing, or harming, *id.*

§§ 1532(19), 1538(a)(1); and mandatory consultations by other federal agencies to ensure that the species is not being harmed by an agency action, *id.* § 1536.

## **B. Factual Background**

### **1. The southwestern willow flycatcher**

The southwestern willow flycatcher is a neotropical migrant songbird with unique vocalizations and nesting habits, along with subtle differences in color and morphology from other willow flycatcher subspecies. Administrative Record (“AR”) at 396, 398, 621.<sup>3</sup> The flycatcher has a grayish-green back and wings, whitish throat, light grey-olive breast, and pale yellowish belly. *Id.* at 396, 621. Unlike the northern subspecies’ crisp, sneezy “fitz-bew” call, the flycatcher sings a longer, slurred “fit-za-bew.” *Id.* at 398. And while all willow flycatchers prefer to nest in areas with surface water nearby, the flycatcher nests very close to surface water or saturated soils. *Id.* The flycatcher breeds in the southwestern United States, typically between May and September, and migrates to Latin America for the winter. *Id.* at 398, 621, 632–34.

The Service has found that the flycatcher is endangered. *Id.* at 874. According to the Service, widespread cattle grazing along rivers in the Southwest is a serious threat to the songbird and its habitat, and excessive grazing practices have damaged riparian areas where the flycatcher nests. *Id.* at 659–63, 817–19. As livestock are allowed to trample and eat the vegetation along rivers, they eliminate or reduce the density of shrubs and plants that provide nesting, shelter, and foraging habitat for the flycatcher. *Id.* at 841. Dams and diversions across the Southwest have further harmed the bird’s nesting habitat by altering river flows. *Id.* at 871.

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<sup>3</sup> The Administrative Record is consecutively paginated and docketed across Dkts. 35-1, 35-2, and 35-3. Citations to the Administrative Record follow the internal pagination, not ECF pagination.

## 2. Taxonomic classification of the southwestern willow flycatcher

A.R. Phillips (1948)<sup>4</sup> first categorized the southwestern willow flycatcher as a subspecies. AR at 792. In 1992, the Center for Biological Diversity petitioned the Service to classify the flycatcher as endangered under the ESA. *Id.* at 321. The Service did so in February 1995. *Id.* at 396–417 (“Listing Decision”). In its Listing Decision, the Service acknowledged that the taxonomy of the flycatcher “continues to pose questions and may be revised in the future.” *Id.* at 400. But after reviewing the available scientific data, “the Service accept[ed] the majority opinion that *E.t. extimus* is a valid subspecies.” *Id.* The Service published the boundaries of a final critical habitat designation for the bird in 1997. *Id.* at 785. Following a 1998 lawsuit from Cattle Growers, the Service vacated the original boundaries of the critical habitat for new boundaries. *Id.* at 419, 785. And following a lawsuit from the Center for Biological Diversity, the Service again redesignated the critical habitat area in 2013. *Id.* at 419.

After the Listing Decision, several scientific studies and reports confirmed the validity of the flycatcher as a subspecies. *See id.* at 796. “While there was early debate about the number of willow flycatcher subspecies and their distribution, a broader body of published peer-reviewed studies and . . . quantitative evaluations. . . support[ed] southwestern subspecies classification.” *Id.* at 796–97 (citation omitted) (listing several such findings from sources including peer-reviewed ornithological journals, state wildlife agencies, federal research and wildlife agencies, environmental consulting firms, private institutions, and universities).

In 2014, the Service published a “Five-Year Review” of the flycatcher, as required by the ESA. *Id.* at 612; *see* 16 U.S.C. § 1533(c)(2). At that time, the Service was “not aware of any

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<sup>4</sup> The Court adopts the citation format the parties used for scientific articles, save that it uses only the lead author’s name in its citations. A full citation for each article can be found in the Administrative Record Index at Dkt. 35. The Court also appends the Index to this opinion.

changes to the taxonomic classification or nomenclature of the flycatcher.” AR at 632. The Service gave the bird a “3C” priority number, indicating that the flycatcher “continues to face a high degree of threat, has a high potential for recovery, is a subspecies, and experiences conflict with economic development, particularly from impacts associated with aquatic and riparian habitats.” *Id.* at 691. The Service continued to list the flycatcher on the endangered species list. *Id.*

### **3. Zink’s commentary and the Petition**

In 2015, Dr. Robert M. Zink published a peer-reviewed commentary in the scientific ornithological journal *The Condor* concerning the southwestern willow flycatcher’s taxonomic status. AR at 20345–56. Zink did not collect any new data, but reanalyzed existing quantitative data on plumage coloration and genetic variation in mitochondrial DNA and nuclear loci. *Id.* at 20348–49. He conducted an Ecological Niche Model analysis (“ENM”) to test niche divergence and concluded that the flycatcher does not have a significantly different climatic niche from its nearest northern geographic neighbor, *E. t. adastus*. *Id.* 20351–54. And he critiqued wildlife biologist James A. Sedgwick’s 2001 study comparing the songs that differentiate the flycatcher and *E. t. adastus*. *Id.* at 20348.

Applying new techniques to old data, Zink reached the following conclusions: genetic variation and morphological differences among willow flycatchers transition gradually, undermining subspecies categorization; the willow flycatcher species has a broad ecological tolerance; the southwestern willow flycatcher does not show the ecological divergence that supports subspecies classification; and prior findings of differentiation were incorrect. *Id.* at 20352–54. He concluded that the southwestern willow flycatcher is not a subspecies and critiqued earlier studies that found otherwise.

In 2015, Cattle Growers petitioned the Service to remove the flycatcher from the endangered species list, asserting that the flycatcher is not a valid subspecies. *Id.* at 714–57.<sup>5</sup> Relying heavily on Zink’s commentary, it argued that “recent data demonstrate that there are no reliable ecological, morphological, or genetic distinctiveness measures that can differentiate between ‘Southwestern’ willow flycatchers and other willow flycatcher populations.” *Id.* at 750. And it contended that “[t]he original listing was predicated on incomplete data and incorrect assumptions regarding the distinctiveness of the subspecies.” *Id.*

#### **4. The Service’s analysis of the Petition**

The Service conducted a ninety-day review of the Petition and published its finding that the Petition “present[ed] substantial scientific or commercial information indicating that the petitioned action (delisting) may be warranted . . . based on information related to taxonomic status.” AR at 782. It invited public comment, *id.*, and reexamined the flycatcher’s taxonomic classification as required by the ESA, *id.* at 879. Simultaneously, the Service conducted the required five-year review of the flycatcher’s endangered status. *Id.* at 785.

The Service received 24,716 comments, including nineteen letters, in response to its request for public comment. *Id.* at 791. All but eighteen of the comments reflected form language opposing delisting. *Id.* Of the nineteen distinct letters received, seventeen opposed delisting and two supported Zink’s analysis. *Id.* No commentator submitted new data; however, the Service received a 2016 peer-reviewed rebuttal of Zink’s 2015 work by Tad C. Theimer, also published in *The Condor*. *Id.* Theimer concluded that available data supported classifying the

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<sup>5</sup> The Petition also argued that—even assuming the flycatcher could be classified as a valid willow flycatcher subspecies—a proper threat analysis confirmed that it is not endangered. AR at 734–50. The Service rejected this argument. *Id.* at 811. Cattle Growers does not challenge that decision here.

flycatcher as a subspecies. *See id.* at 792. Getting in the last word, Zink provided three more comments after the comment period closed responding to Theimer’s critique. *Id.* at 791. The Service highlighted that “[b]oth Zink (2015) and Theimer *et al.* (2016) evaluated the same information, but reached opposite conclusions on nearly every important issue.” *Id.* at 792.

On December 29, 2017, the Service reaffirmed the flycatcher as an endangered subspecies and denied the Petition in its Denial and ninety-one page Finding. *Id.* at 785–876, 879. The Finding “provide[d] information on how a subspecies is defined under the Act along with the taxonomic history of the southwestern willow flycatcher.” *Id.* at 792. It “address[ed] concerns raised in the petition about taxonomic citations from the 1995 listing rule and the subspecies breeding range and boundary”; “summarize[d] recent flycatcher genetic, behavioral, and morphological studies that reached conclusions supporting subspecies classification”; “present[ed] results and evaluate[d] issues raised primarily by the petition and Zink (2015) and Theimer *et al.* (2016)”; and “provide[d] [its] conclusions.” *Id.* The Service identified what it considered to be the best scientific evidence and explained its reasoning. *See id.* at 789–808.

The Finding started by recognizing that “[a] common way to distinguish organisms belonging to different subspecies (of the same species) is whether they are capable of interbreeding and producing fertile offspring, but usually do not interbreed in nature due to geographic isolation, sexual selection, or other factors.” *Id.* at 793. And that “[f]or nearly 70 years, scientists have strived to understand, evaluate, describe, and classify the willow flycatcher and its subspecies (with a more recent emphasis on the southwestern willow flycatcher) under the scrutiny of the peer review process.” *Id.* The Service concluded that “peer review is the most accepted and reliable process for assessing the quality of scientific information.” *Id.*

After surveying seven decades of scientific analyses on the flycatcher's classification, the Service took up the Petition's critique that the agency had miscited earlier studies in its 1995 Final Rule. *Id.* at 797–98. It described this critique at length, reviewed the relevant literature in light of that critique, and again concluded that the literature supported subspecies classification. *Id.* The Service then reviewed the post-listing literature and found it also confirmed the classification. *Id.* at 799–805, 807–08.

The Service next took up the Petition's contention that if the flycatcher were a valid subspecies its "range[] would be far better known." *Id.* at 798. It conceded there was early disagreement as to the boundaries of the flycatcher's range. *Id.* But after extensive review of the literature, it concluded that "[d]ue to improved information about flycatcher distribution and abundance through thousands of standardized protocol surveys, information from genetic studies, and improved knowledge about the bird's habitat and natural history, the breeding range of the flycatcher[, as] refined in 2002, is well known, and has remained stable." *Id.* at 799. It accordingly rejected the Petition's assertion that the flycatcher's range is not well known. *Id.*

The Service next highlighted that since the 1995 listing "more modern techniques ha[ve] been applied to quantitatively evaluate the willow flycatcher's classification." *Id.* It found that "studies using modern techniques found differences in willow flycatcher behavior (song), morphology (plumage), and genetics" that "support[ed] a southwestern subspecies classification." *Id.* It addressed each of these methods for subspecies classification.

*Genetic Sampling.* The Service concluded that the best available genetic data supports subspecies classification. *Id.* at 802. First, it observed that Paxton (2000) analyzed mitochondrial DNA and found a "highly significant degree of separation between *E.t. extimus* and the three northern subspecies" along the same geographic boundary established by

morphological studies. *Id.* at 800. Next, it considered that Paxton (2007) identified a limited “region of genetic intergradation” along the subspecies boundary consistent with subspecies classification. *Id.* at 801.

The Service considered Zink’s claim that Paxton (2007) had incorrectly graphed relevant data. By Zink’s calculation, Paxton’s data produced a gradual genetic transition at the subspecies boundary uncharacteristic of distinct subspecies. *Id.* at 801, 20350.<sup>6</sup> But the Service concluded that Theimer (2016) demonstrated that Zink (2015), not Paxton (2007), graphed the data incorrectly. *Id.* at 801. Theimer’s analysis of the data showed a genetic break “roughly concordant with the boundary” between willow flycatcher subspecies. *Id.* at 801, 18108. The Service also considered Zink’s 2017 rebuttal to Theimer’s critique of his analysis.<sup>7</sup> *Id.* at 791; *see also infra* Section III.C. Applying its expertise to the conflicting literature, the Service, found Paxton (2000), Paxton (2007), and Theimer (2016) most persuasive. AR at 802.

*Ecological Niche Modeling.* The Service concluded that ecological analyses are not the best available science. *Id.* at 802–03. Zink (2015) applied ecological niche modeling, a method that “link[s] geographic occurrence data of animals with GIS data layers,” to conclude that willow flycatcher subspecies lack “significant ecological divergence.” *Id.* at 802, 20351–52. Again, Theimer (2016) highlighted flaws with Zink’s data analysis and demonstrated how data quality can impact ENM results. *Id.* at 803, 18108–10. Though Zink’s ENM analysis weighed against subspecies classification, the Service did not find it persuasive. It instead credited

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<sup>6</sup> Parallel citations to the Administrative Record in this section refer to the Finding and the underlying scientific materials on which the Service relied.

<sup>7</sup> Because of the timing, the Cattle Growers’ Petition did not account for Theimer’s 2016 response to Zink (2015) or Zink’s 2017 response to Theimer (2016). Still, the Service reviewed and considered both Theimer (2016) and Zink (2017). *See infra* Section III.C.

Theimer’s conclusion that the ENM test “is too weak to detect differences among species” and “should not be used as a standard by which to measure distinctness of subspecies.” *Id.* at 803, 18109–10.

*Song Comparison Between Willow Flycatcher Subspecies.* The Service concluded that studies comparing the flycatcher’s song to the song of another willow flycatcher subspecies pointed toward subspecies classification. *Id.* at 803–04. Sedgwick (2001) determined that flycatcher songs are longer and have a lower frequency at maximum amplitude than those of other willow flycatcher subspecies. *Id.* at 803, 17258. Zink (2015) criticized Sedgwick for not grouping song samples entirely by subspecies. *Id.* at 803, 20348. The Service rejected this critique and concluded that Sedgwick’s analysis constituted the best available science. *Id.* at 803–04.

*Plumage Coloration.* The Service found that plumage coloration analysis also supports subspecies classification. *Id.* at 805. Paxton (2010) used a colorimeter, an electronic color measuring device, to record variation in plumage color among willow flycatcher subspecies. *Id.* at 804, 20430. The data “showed strong statistical differences” along subspecies boundaries consistent with both genetic information and prior “qualitative comparison of museum specimens.” *Id.* at 804, 20433. Zink (2015) critiqued Paxton’s colorimeter study because it excluded certain willow flycatchers from boundary sites. *Id.* at 804, 20351. He reevaluated the data, including willow flycatchers from boundary populations, to show a “smooth cline in plumage variation from north to south . . . less suggestive of subspecies than a more fractured separation.” *Id.* at 804, 20353. Theimer (2016) applied a different technique to analyze willow flycatcher crown hues and addressed Zink’s concerns about boundary samples. *Id.* at 804, 18112. Unlike Zink (2015), Theimer (2016) found a step cline consistent with subspecies

classification along the geographic subspecies boundary. *Id.* The Service determined that both Zink (2015) and Theimer (2016) “provided reasonable opinions and analysis” on Paxton (2010)’s plumage data using “innovative techniques and technological advances.” *Id.* at 804–05. The Service concluded, however, that Theimer (2016) used superior methodology and accounted for Zink’s concerns. *Id.* at 805.

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In conducting its review, the Service highlighted that “[t]he long history of willow flycatcher peer-reviewed studies/reports and conclusions by taxonomists is an important component to consider when addressing potential taxonomic changes.” *Id.* at 808. And that “[t]here is a large body of literature developed by the scientific community that has shaped willow flycatcher and subspecies classification.” *Id.* These studies “have originated, been reviewed, and withstood debate among independent, university, and state and federal scientists, and their results have been reviewed, reported, and also published in ornithological scientific journals.” *Id.* This literature, the Service found, has consistently, though not uniformly, concluded that the flycatcher is a valid subspecies. *Id.*

### **C. Procedural Background Before this Court**

On December 13, 2021, Cattle Growers sued Defendants the U.S. Fish and Wildlife Service; the U.S. Department of the Interior; Debra Haaland, in her official capacity as Secretary of the Interior; and Martha Williams, in her official capacity as Principal Deputy Director and Acting Director of the Service. Dkt. 1 ¶¶ 25–28. The Complaint alleges that the Denial and

Finding<sup>8</sup> “violated the fundamental administrative law principle of reasoned decision-making” because they “set forth no definition of ‘subspecies;’ provided no governing criteria for determining whether any given population . . . qualifies as a subspecies; and ignored crucial scientific evidence bearing on the flycatcher’s subspecies designation.” *Id.* ¶ 4. The Complaint brings claims for violations of the ESA and the APA. *Id.* ¶ 5. Cattle Growers requests that the Court vacate the Denial and remand the matter to the Service. *Id.*

Defendants timely answered on March 7, 2022, Dkt. 10, provided Cattle Growers with the Administrative Record on June 13, 2022, Dkt. 15, and supplemented it twice thereafter, Dkts. 22, 34.<sup>9</sup>

On May 6, 2022, the Court admitted the Center for Biological Diversity and the Maricopa Audubon Society as Defendant-Intervenors, in part because their members have “recreational, aesthetic, scientific, and professional interests” in protecting and conserving the flycatcher. Min. Order of May 6, 2022. The Center is a nonprofit organization devoted to “protect[ing] imperiled species and their habitats.” Dkt. 13 (Mot. Intervene) at 12. It has about 88,000 members, many of who live in the flycatcher habitat and “regularly enjoy . . . educational, recreational, and scientific activities concerning the flycatcher and its habitat.” *Id.* Similarly, the Society is a

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<sup>8</sup> The Complaint refers to the Denial and Finding collectively as a “Final Rule.” Dkt. 1 ¶ 4. However, the Service found that a rule was “not warranted.” AR at 870, 879. The Service does not contend that the distinction makes a difference for purposes of this suit, likely because the Service’s action is indisputably final.

<sup>9</sup> In May 2023, the Court denied a motion by Cattle Growers to compel completion of the Administrative Record with two internal Service emails because they are deliberative and thus immaterial to the Service’s stated reasons for its decision. Min. Order of May 24, 2023. The Court invited Cattle Growers to include in its summary judgment motion argument that inclusion of the emails would support its position. Dkt. 24 (May 24, 2023 Hearing Tr.) at 37:11–15. It did not take up this invitation. The Court nonetheless reviewed the emails again and concludes that their inclusion in the Administrative Record would not have affected the present decision.

nonprofit organization based in Arizona “dedicated to the study and enjoyment of birds” and “the protection and restoration of southwestern riparian habitats.” *Id.* at 13. Like the Center, the Society has members “who regularly enjoy . . . educational, recreational, and scientific activities concerning the flycatcher and its habitat.” *Id.*

Cattle Growers moved for summary judgment on July 5, 2023. Dkt. 25. On August 7, 2023, Defendants and Defendant-Intervenors cross-moved for summary judgment. Dkts. 26, 28. The parties completed briefing on the Cross-Motions on September 19, 2023, Dkt. 33, and the Court heard oral argument on October 26, 2023.

## II. LEGAL STANDARD

In an APA case involving cross-motions for summary judgment, “the Court’s role is limited to reviewing the administrative record, so the standard set forth in [Federal Rule of Civil Procedure 56] does not apply.” *Cap. Area Immigrants’ Rts. Coal. v. Trump*, 471 F. Supp. 3d 25, 36–37 (D.D.C. 2020) (cleaned up). Instead, “summary judgment serves as the mechanism for deciding, as a matter of law, whether the agency action is supported by the administrative record and otherwise consistent with the APA standard of review.” *Id.* (cleaned up). The Court may set aside an agency action if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).<sup>10</sup>

Courts must defer to “the informed discretion of the responsible federal agencies” when, as here, decision-making “requires a high level of technical expertise.” *Marsh v. Or. Nat. Res. Council*, 490 U.S. 360, 377 (1989). “Given the expertise of the [Service] in the area of wildlife

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<sup>10</sup> Though Plaintiff challenges the Denial under both the ESA’s citizen suit provision and the APA, the APA standard of review applies because the ESA does not specify a standard of review for agency action. *Cabinet Mountains Wilderness/Scotchman’s Peak Grizzly Bears v. Peterson*, 685 F.2d 678, 685 (D.C. Cir. 1982).

conservation and management and the deferential standard of review, the Court begins with a strong presumption in favor of upholding decisions of the [Service].” *Am. Wildlands*, 478 F. Supp. 2d at 96 (cleaned up); *see also Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 103 (1983).

The Service must “examine the relevant data and articulate a satisfactory explanation” for its actions. *Motor Vehicle Mfrs. Ass’n of the U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *see also Inteliquent, Inc. v. FCC*, 35 F.4th 797, 802 (D.C. Cir. 2022) (quoting *FCC v. Prometheus Radio Project*, 592 U.S. 414, 423 (2021)). The Service’s decision would be arbitrary and capricious if it “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or [was] so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *State Farm*, 463 U.S. at 43.

### III. DISCUSSION

#### A. Cattle Growers Has Standing

The Court must satisfy itself that Cattle Growers has standing even though neither the Service nor Intervenor-Defendants argue otherwise. And, indeed, it does.

An organization such as Cattle Growers has standing when “(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization’s purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343 (1977). Cattle Growers easily satisfies this standard.

Standing requires (1) a “concrete and particularized” injury that is “actual or imminent”; (2) that the defendant’s challenged conduct caused the injury; and (3) that the requested relief is likely to redress the injury. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560–61 (1992) (cleaned up). In a procedural injury case, the “litigant has standing if there is some possibility that the requested relief will prompt the injury-causing party to reconsider the decision that allegedly harmed the litigant.” *Massachusetts v. EPA*, 549 U.S. 497, 518 (2007).

To prove that at least one of Cattle Growers’ members would have standing to sue in his own right, Cattle Growers submitted declarations from a long-time member, Hugh McKeen, Dkt. 25-3; Michelle Frost-Maynard, its interim executive director, Dkt. 25-2; and Eric Van Pelt, a certified appraiser, Dkt. 25-4. McKeen, a New Mexican rancher and cattle grower who belongs to the organization, declares that his family “derives its livelihood from the sale of cows and calves” and that his “grazing allotment and private land overlap substantially with designated critical habitat for the [flycatcher].” Dkt. 25-3 (McKeen Decl.) ¶¶ 3–4, 12, 15.

The flycatcher’s endangered status harms and burdens McKeen in at least four ways. *First*, the listing diminishes his property value, due in part to “negative public perception of land designated as critical habitat.” *Id.* ¶¶ 17–18; *see also* Dkt. 25-4 (Van Pelt Decl.) ¶¶ 8–9. *Second*, he must undertake the onerous task of obtaining grazing permits subject to the Service’s opinion on how the permits will impact the flycatcher or its designated critical habitat. McKeen Decl. ¶ 19; *see* 50 C.F.R. §§ 402.13–.14; *Ctr. for Biological Diversity v. EPA*, 56 F.4th 55, 62 (D.C. Cir. 2022) (explaining the consultation process). *Third*, he must spend extra money and time to keep cattle from grazing or watering in the flycatcher’s critical habitat. McKeen Decl. ¶¶ 20–21. And *fourth*, restrictions on modifying that habitat prevent him from making improvements or engaging in routine management, including “basic flood control

activities.” *Id.* ¶¶ 22, 24–26. Noncompliance could result in civil or criminal penalties.

*Id.* ¶ 22. Because McKeen has concrete interests affected by the flycatcher’s endangered classification and the requested relief might prompt the Service to reconsider that classification, he has standing to sue in his own right.

The second and third *Hunt* requirements also support standing. Cattle Growers is a “trade association that represents roughly 1,400 ranchers and landowners,” Dkt. 25-2 (Frost-Maynard Decl.) ¶ 4, including many who own and graze their cattle on land subject to restrictions associated with the flycatcher’s status as an endangered subspecies, *id.* ¶ 13. Its “primary purpose has been to serve as an advocate for New Mexico ranchers and landowners and to protect ranching from a variety of threats, including overreaching environmental regulations.” *Id.* ¶ 4. Cattle Growers’ decision to petition the Service to delist the flycatcher furthers that purpose. And associational action is suitable because the participation of individual members would not impact a favorable remedy. *Ctr. for Biological Diversity v. U.S. Dep’t of the Interior*, 640 F. Supp. 3d 59, 66 (D.D.C. 2022).

Cattle Growers has standing.

#### **B. The Service Appropriately Relied on Taxonomists’ Definitions of Subspecies**

Cattle Growers argues that the Denial is arbitrary and capricious because the Service did not provide a general definition for the term “subspecies” against which it considered the evidence. Dkt. 25-1 at 39–49. Further, Cattle Growers argues, the Denial is invalid because in the Finding the Service “failed to articulate any standard to falsify the hypothesis that the southwestern willow flycatcher is a subspecies.” *Id.* Each argument fails.

## 1. The Service is not a lexicographer

Cattle Growers’ “core” argument is that the Service erred by deciding the Petition without first defining “subspecies.”<sup>11</sup> Dkt. 40 (October 26, 2023 Hearing Tr.) at 4:24–5:12. The Service, it claims, “cited to several conflicting definitions of subspecies and acknowledged that various definitions or descriptions of subspecies exist.” Dkt. 25-1 at 39 (cleaned up). But “[w]hat it did not do was articulate any standard of its own for what constitutes a ‘subspecies,’ either generally or as applied to willow flycatcher populations.” *Id.* at 39–40. In light of this failure, the Service’s analysis of the scientific data was inapposite because it “insulate[d the Service’s] taxonomic decision-making from scrutiny.” *Id.* at 41. Not so.

Regulations required the Service to rely “on standard taxonomic distinctions and the biological expertise of the Department and the scientific community.” 50 C.F.R. § 424.11(a). It plainly did so. The ESA covers “subspecies.” 16 U.S.C. § 1532(16). The Service confirmed that taxonomists classify subspecies by considering whether the animals “are capable of interbreeding and producing fertile offspring, but usually do not interbreed in nature due to geographic isolation, sexual selection, or other factors.” AR at 793. It then surveyed four specific methods for classifying a bird subspecies specifically: genetic sampling, ecological niche modeling, song comparison, and plumage coloration analysis. *Id.* at 800–05.

Nothing in the ESA or APA required the Service to pick a single bright-line definition to apply woodenly across its listing decisions. To the contrary, in the context of rulemaking under

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<sup>11</sup> The Government contends that the Court lacks jurisdiction because the ESA’s citizen-suit provision “does not impose a nondiscretionary duty to articulate a definition or standard for identifying subspecies.” Dkt. 26-1 at 32. The argument misconstrues Cattle Growers’ claim. Cattle Growers does not ask for a standalone agency decision defining subspecies, but rather petitions the service to delist a particular animal. Dkt. 25-1 at 39–49. Cattle Growers’ claim therefore falls within the Government’s sovereign immunity waiver. *See* 16 U.S.C. §§ 1533(c)(1), 1540(g)(1)(C).

the ESA the D.C. Circuit has explained that “an agency is free to rely on common English usage without adopting specialized definitions.” *In re Polar Bear Endangered Species Act Listing & Section 4(d) Rule Litig.*, 709 F.3d 1, 15 (D.C. Cir. 2013). An agency is not “necessarily required to define [a] term in its initial general regulation . . . or . . . issue a comprehensive definition all at once.” *Pearson v. Shalala*, 164 F.3d 650, 661 (D.C. Cir. 1999). Instead, “[an] agency is entitled to proceed case by case or, more accurately, sub-regulation by sub-regulation,” so long as it is “possible for the regulated class to perceive the principles which are guiding agency action.” *Id.*; *see also In re Polar Bear*, 709 F.3d at 15–16.

The Court need look no further than the Petition to conclude that a reasonable individual could understand the Service’s guiding principles. That is so because the types of scientific data and analyses (*e.g.*, genetic, morphological, etc.) that guided the Service’s review are the very ones that Cattle Growers deployed in that submission. *Compare* AR at 732–34, *with id.* at 799–805. To be sure, the Petition had a different take on the conclusions to be drawn from these principles, but that is immaterial for purposes of the Court’s review under the APA. *See Am. Wildlands*, 478 F. Supp. 2d at 100 (quoting *Marsh*, 490 U.S. at 378).

The ESA also required the Service to make listing determinations “solely on the basis of the best scientific and commercial data available.” 16 U.S.C. 1533(b)(1)(A); *see also Am. Wildlands*, 530 F.3d at 998 (quoting *Sw. Ctr. for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000)). Cattle Growers complains that the Service’s analysis “boils down to a judgment that there exist ‘differences’ between the southwestern subpopulation and other subpopulations of the species.” Dkt. 25-1 at 41. Hardly. The Service assessed the work of “[s]cientists, institutions, wildlife agencies, universities, journals, and taxonomists associated with conducting, writing, evaluating, peer reviewing, and publishing studies” concerning the

classification of the flycatcher. AR at 796. It then: addressed the Petition’s argument that the agency’s previous taxonomic citations were incorrect, *id.* at 797–98; discussed the flycatchers’ breeding range and boundary, *id.* at 798–99; summarized recent flycatcher genetic, behavioral, and morphological studies, *id.* at 800–05; presented results and evaluated issues raised by Zink (2015) as rebutted by Theimer (2016), *id.* at 800–08; and explained its conclusions, *id.* at 807–08. It concluded that the “best available scientific and commercial information,” which it identified and discussed at length, supported classifying the flycatcher as a subspecies. *Id.* at 807. This was so even accounting for evolving scientific methods and opinions since 1948. *Id.* at 796–97.

## **2. A nonfalsifiable method is not arbitrary and capricious as a matter of law**

Cattle Growers makes a more specific argument that the Service’s work is arbitrary and capricious because it cannot be falsified. Dkt. 25-1 at 39–49. Such a failure apparently did not bother Cattle Growers much when drafting its Petition, which also used a nonfalsifiable methodology. *Compare* AR at 732–34, *with id.* at 799–805. That aside, the argument fails on the law. The Court is not aware of any case imposing a categorical rule that agencies must use falsifiable standards in all instances. In fact, the case law suggests otherwise. Looking to the D.C. Circuit, the Ninth Circuit has held that an agency can list a species as threatened without defining “likely” with specific quantitative targets because “neither the ESA nor our case law requires the agency to calculate or otherwise demonstrate the ‘magnitude’ of a threat to a species’ future survival before it may list a species as threatened.” *Alaska Oil & Gas Ass’n v. Pritzker*, 840 F.3d 671, 684 (9th Cir. 2016) (citing *In re Polar Bear*, 709 F.3d at 14–15). An agency can assess the best available scientific evidence in its totality against a clear yet unfalsifiable standard—here the methods taxonomists use to classify bird subspecies.

Cattle Growers relies on *Pearson*, in which the D.C. Circuit addressed a Food and Drug Administration (“FDA”) regulation allowing the agency to authorize a health claim on a dietary supplement label “only if it finds ‘significant scientific agreement’ among experts that the claim is supported by the available evidence.” 164 F.3d at 651. The court held that the regulation was too vague because the FDA gave no “definitional content to the phrase ‘significant scientific agreement.’” *Id.* at 660–61. The court continued that an agency cannot proceed on an “I know it when I see it” basis. *Id.* at 660. Fair enough, but that is not what the Service did here. The Service assessed four methods taxonomists use to classify willow flycatcher subspecies. AR at 800–05. Then, it applied its expertise to explain which studies constituted the best scientific evidence and why those studies supported subspecies classification for a particular bird. *Id.* at 800–08. That is a far cry from the vague requirement of “significant scientific agreement” the FDA employed in the generally applicable rule at issue in *Pearson*.

Nor is the Court persuaded by Cattle Growers’ contention that a falsifiable standard is important to allow laypeople to classify individual birds. Dkt. 25-1 at 46–47. Cattle Growers suggests the following rule: requiring “that 75 percent of a population, based on one character or a defining set of characters, [be] outside 99 percent of the range of the broader species.” Dkt. 40 at 21:1–4. But when asked at argument whether such a standard would rule out the flycatcher as a subspecies, counsel answered, “Well, we don’t know because the Service hasn’t set forth that as a standard or definition.” *Id.* at 21:7–9. That answer only confirms that a bright-line rule alone does not suffice to guide the lay public; if it did, then Cattle Growers could have answered the question without reference to the Service’s work. Laypeople can, however, review the Service’s extensive Finding to understand the primary methods it consulted to assess subspecies classification and how the Service applied them. Those who do will know that the Service relied

on analysis of genetic sampling, AR at 800–02; that the Service did not believe ecological analyses to constitute the best available science, *id.* at 802–03; that the Service considered variations in song among birds, *id.* at 803–04; and how the Service analyzed colorimeter studies, *id.* at 804–05.

### C. The Service Considered Relevant and Contradictory Evidence

Cattle Growers also argues that the Service’s decision not to consider Zink (2017) was arbitrary and capricious because the article contained new information and relevant evidence bearing on the Petition by rebutting Theimer (2016).<sup>12</sup> Dkt. 25-1 at 49–55. By engaging with Zink (2015) and Theimer (2016) without considering Zink (2017), Cattle Growers argues, the Service imposed an arbitrary double standard. *Id.* at 54–55. The Service counters that it considered Zink (2017) and explained why that article did not change its conclusion. Dkt. 26-1 at 47–52. The Service has the better argument.

The Finding did not ignore Zink (2017) but concluded that it is not the best available scientific evidence. The Service explained:

We reviewed Zink’s 2017 letter in *Open Ornithology* while finalizing this notice and found that no new data were presented in this document. This document continued to reanalyze issues raised in his commentary published in *The Condor* (Zink 2015), and provided further opinions on topics and methods addressed in Theimer *et al.* (2016). Because there was no new information in this letter, it did not change our evaluation.

AR at 791. Accordingly, this is not a case in which the Service “disregard[ed] available scientific evidence that is in some way better than the evidence [it] relie[d] on.” *Sw. Ctr. for*

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<sup>12</sup> Cattle Growers appears to have jettisoned this argument. By oral argument, it had narrowed its suit to challenging the Service’s methodology and claimed it was “agnostic” on what constitutes the “best available science.” Dkt. 40 at 4:9–5:18. The Court addresses it for the sake of completeness.

*Biological Diversity*, 215 F.3d at 60 (quoting *City of Las Vegas v. Lujan*, 891 F.2d 927, 933 (D.C. Cir. 1989)).

The Service’s decision not to change its evaluation in light of Zink (2017) fits its approach throughout the Finding. The Service noted that, “[i]n general, studies where original information is collected specific to the analyses being conducted, along with rigorous hypothesis testing, can lead to stronger conclusions.” AR at 808. If no new data is available, then the Service relies on studies, like Theimer (2016), that apply new analytical techniques to the existing data. Zink (2017) introduced no new data, applied no new analytical techniques, and presented no novel analysis.<sup>13</sup> It did little more than support the Zink (2015) analysis by critiquing Theimer (2016), a critique the Service did not find persuasive. The Service concluded that Zink (2017) added nothing new and was not the best available scientific evidence.

Cattle Growers’ argument boils down to a disagreement as to whether Zink (2017) is the best available scientific information. Courts are ill-equipped to make scientific determinations or choose between competing scientific studies. *See Pharm. Mfg. Rsch. Servs., Inc. v. FDA*, 957 F.3d 254, 265 (D.C. Cir. 2020). That is why deference to agency reasoning is strongest, in cases such as this, where an agency’s scientific and technological expertise is at the forefront. *Balt. Gas & Elec. Co.*, 462 U.S. at 103; *see also Am. Wildlands*, 530 F.3d at 1000. That the Service did not rely as heavily on Zink (2017) as Cattle Growers would have preferred is immaterial where, as here, the agency considered the study and reasonably explained why it did not constitute the best available scientific information.

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<sup>13</sup> Cattle Growers conceded at oral argument that Zink (2017) relied on previously existing data. Dkt. 40 at 3:6–10.

#### IV. CONCLUSION

Cattle Growers has not shown that the Service's determination that the flycatcher is an endangered species was arbitrary and capricious. Accordingly, the Court will **DENY** Plaintiff's Motion for Summary Judgment, Dkt. 25; **GRANT** Federal Defendants' Cross-Motion for Summary Judgment, Dkt. 26; **GRANT** Defendant-Intervenors' Cross-Motion for Summary Judgment, Dkt. 28; and **DISMISS** Plaintiff's claims with prejudice. An Order consistent with this memorandum opinion has been entered.

DATE: February 28, 2024

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ANA C. REYES  
United States District Judge

## APPENDIX

Document	AR Page Numbers
Center for Biological Diversity's comments on delisting petition	FWS000321-000341
SWWF, Email, Robert Zink, July 1, 2016	FWS000342
Zink response to Commentary on SWWF submitted, Attachment	FWS000343-000356
Email Re SWWF, Brady McGee, July 1, 2016	FWS000357-000358
Email Re SWWF, Robert Zink, July 1, 2016	FWS000359-000360
Email Re SWWF, Robert Zink, Nov. 7, 2016	FWS000364-000365
SWWF and conservation revision final, Attachment	FWS000366-000383
Email Re SWWF, Robert Zink, Jan. 5, 2017	FWS000384-000385
Zink swwf open ornith	FWS000386-000395
Final Rule - FR Notice for Listing Southwestern Willow Flycatcher as Endangered, USAR at FWS, Federal Register, Feb. 27, 1995	FWS000396-000417
Final Rule - FR Notice for Southwestern Willow Flycatcher Critical Habitat Final Designation, USAR at FWS, Federal Register, Jan. 3, 2013	FWS000418-000609
5-Year Review Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> ) (final), USAR at FWS, 5-year Review, Aug. 15, 2014	FWS000610-000713
Petition to Delist Southwestern Willow Flycatcher, Pacific Legal Foundation, Aug. 19, 2015	FWS000714-000757
90-Day Finding - FR Notice on 29 Petitions, USAR at FWS, Federal Register Notice, Mar. 16, 2016	FWS000770-000784
12-month Finding and 5-year Status Review Southwestern Willow Flycatcher, USAR at FWS, 12-Month Finding and 5-year Review, Dec. 3, 2017	FWS000785-000876
Notice of 12-month Finding on Petition to Delist Southwestern Willow Flycatcher, USAR at FWS, Federal Register Notice, Dec. 29, 2017	FWS000877-000879
Letter to USAR at FWS with Petition to Delist the Southwestern Willow Flycatcher, Pacific Legal Foundation, Aug. 19, 2015	FWS001165-001208
Excerpt of Recovery Plan Southwestern Willow Flycatcher, USAR at FWS, Recovery Plan, Aug. 30, 2002	FWS004035-004050
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A Review of the Races of the Traill's Flycatcher, Aldrich, 1951	FWS011071-011077
Excerpt of Checklist of North American Birds, American OU, 1998	FWS011105-011118
Utah Birds Geographic Distribution and Systematics species accounts, Behle, 1985	FWS012020-012025
Comments on the Taxonomy of <i>Empidonax Traillii</i> (Willow Flycatcher), Browning, 1993	FWS012684-012700
Genetic Variation in the Endangered Southwestern Willow Flycatcher, Busch et al., 2000	FWS012701-012711
Chapter 7 - Migration and Winter Ecology, Finch et al., 2000	FWS013366-013377
Taxonomic Considerations in Listing Subspecies Under the US Endangered Species Act, Haig et al., 2006	FWS014311-014323
The Status of the Willow Flycatcher in NM, Hubbard, 1987	FWS014710-014739

<b>Document</b>	<b>AR Page Numbers</b>
A critique of Wang Young and Finch's Field-Identifications of WIFL Subspecies in NM, Hubbard, 1999	FWS014740-014748
Animal Species and Evolution, Mayr, 1966	FWS015229-015259
Commentary Interpreting Negative Results with Taxonomic and Conservation Implications, McCormack and Maley, 2015	FWS015279-015287
Assessing Variation of Plumage Coloration within the WIFL - preliminary analysis, Paxton et al., 2005	FWS016009-016022
Using Molecular Genetic Markers to Resolve a Subspecies Boundary, Paxton et al. 2007	FWS016172-016196
Molecular Genetic Structuring and Demographic History of the WIFL, Paxton, 2000	FWS016208-016259
Birds of Arizona - species account pg 85-86, Phillips et al., 1964	FWS016289-016292
Geographic Variations in <i>Empidonax traillii</i> , Phillips, 1948	FWS016293-016301
Subspecies as a Meaningful Taxonomic Rank in Avian Classification, Remsen, 2010	FWS016329-016345
Willow Flycatcher in The Birds of North America, Sedgwick, 2000	FWS017216-017247
Geographic Variation in the Song of WIFL - Differentiation <i>Empidonax traillii adastus</i> and <i>E. T. extimus</i> , Sedgwick, 2001	FWS017248-017262
A SWFL Natural History Summary and Survey Protocol, Sogge et al., 1997	FWS017761-017794
Commentary - Available Data Support Protection of the SWFL under the ESA, Theimer et al., 2016	FWS018104-018115
<i>Empidonax Traillii Extimus</i> - an endangered subspecies, Unitt, 1987	FWS018138-018144
Website - Species and Subspecies, University of Texas El Paso, 2008	FWS018160-018163
Commentary Genetics, morphology, and ecological niche modeling do not support SWFL, Zink, 2015b	FWS020345-020356
Current Topics in Avian Conservation Genetics with Special Reference to the SWFL, Zink, 2016	FWS020357-020366
Geographic variation in plumage coloration of willow flycatchers <i>Empidonax traillii</i> , Paxton <i>et al.</i> , 2010	FWS020428-020439