

## A CHECK-LIST AND BIBLIOGRAPHY OF HYBRID BIRDS IN NORTH AMERICA NORTH OF MEXICO

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ERNST MAYR (1942:257-270) has discussed in detail some of the philosophical implications of hybridism. He points out, for example, that: "In birds, we have a fair amount of information, since some collectors, sensing their scarcity value, have specialized in the collecting of hybrids, and amateur observers have always been fascinated by them. We can state, on the basis of the data collected by these naturalists, that sympatric hybrids are found primarily in genera in which copulation is not preceded by pair formation and an 'engagement period' [p. 261] . . . Hybrids occur much more rarely among pair-forming species of birds. In such cases the male and female have committed not only an original 'mistake,' but have apparently not 'corrected' it afterwards by abandoning the brood [p. 262]."

In spite of the increased interest in hybridism in birds in recent years, no attempt has been made to compile the many scattered references and reports of hybrids into a single paper since the early compilation by Suchetet (1897). In that classic Suchetet attempted to list all known cases of hybrids in birds. Unfortunately his work is not readily available to most ornithologists in this country.

My attempt to compile known cases of hybrids in birds has been made with three important restrictions: First, I have listed only those cases in which the hybrids presumably resulted from crosses in nature. If hybrids resulting from birds in captivity were listed, the list would be much larger, especially among the ducks and geese (see Ball, 1934:2-4; Sibley, 1938:327-335; Kortright, 1942:43-44; and Delacour and Mayr, 1945:3-55). Second, I have listed only those cases reported from North America north of Mexico. Third, where alternate explanations (intergradation, dimorphism, etc.) have been proposed to account for supposed hybrids, I have made no attempt to evaluate the evidence but, rather, merely report such alternative explanations. Some authors (such as Kortright, 1942:43-44) have discussed hybridism only in a general way and where no specific cases are presented, I have not entered the reference in the check-list.

I wish to emphasize that this check-list and bibliography is certainly incomplete and should be regarded only as a starting point in any bibliographic search. The following sources, among others, yielded clues to the location of the various papers listed in the bibliography: "A Bibliography of Birds" (Strong, 1939-1946); *Zoological Record*; *Biological Abstracts*; and subject indices of *The Auk*, *The Condor*, and for volumes 13-35 and 50-62 inclusive,

of *The Wilson Bulletin*. I have examined the originals of all the papers listed in the bibliography except those preceded by an asterisk (\*).

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CHECK-LIST

*Family Ardeidae. Herons and Bitterns.*

*Ardea occidentalis occidentalis* Audubon  $\times$  *Ardea herodias wardi* Ridgway.  
Great White Heron  $\times$  Ward's Heron.

*Ardea wurdemanni* Baird, 1858:669.

*Ardea wuerdemanni*, Allen, 1888:195.

*Ardea occidentalis*  $\times$  *Ardea herodias wardi* = *Ardea wurdemanni*, Holt, 1928:1-35;  
Peters, 1940:105.

*Family Anatidae. Swans, Geese, and Ducks.*

*Branta bernicla nigricans* (Lawrence)  $\times$  *Branta canadensis hutchinsi* (Richardson). Black Brant  $\times$  Hutchins Goose.

*Branta nigricans*  $\times$  *Branta canadensis hutchinsi*, Ransom, 1927:170.

*Branta bernicla hrota* (Muller)  $\times$  *Chen hyperborea* (Pallas). American Brant  $\times$  Snow Goose.

Brant  $\times$  Snow Goose, Brimley, 1927:427.

*Anser albifrons gambeli* (Hartlaub)  $\times$  *Branta canadensis* (Linnaeus). Tule Goose  $\times$  Canada Goose.

*Anser albifrons gameli*  $\times$  *Branta canadensis*, Suchetet, 1897:738.

White-fronted Goose  $\times$  Canada Goose, Baird, 1873:5.

*Chen caerulescens* (Linnaeus)  $\times$  *Chen hyperborea hyperborea* (Pallas). Blue Goose  $\times$  Snow Goose.

*Chen caerulescens*  $\times$  *Chen hyperborea hyperborea*, Harrold, 1928:290; Sutton, 1931: 335-364; Emery, 1945:636; Sibley, 1949:274.

Conspecific--merely examples of dichromatism, Manning, 1942:168-174.

*Anas platyrhynchos* Linnaeus  $\times$  *Anas rubripes* Brewster. Mallard  $\times$  Black Duck.

*Anas boschas*  $\times$  *Anas obscura*, Dutcher, 1889:133; Suchetet, 1897:137, 682; Bigelow, 1907:382-384.

Mallard  $\times$  Black Duck, Poole, 1929:535.

Mallard  $\times$  Northern Black Duck, Eaton, 1903:64.

*Anas platyrhynchos*  $\times$  *Anas rubripes*, Ridgway, 1909:441; Ball, 1934:23.

*Anas platyrhynchos* Linnaeus  $\times$  *Anas strepera* Linnaeus. Mallard  $\times$  Gadwall.

*Anas breweri* Audubon, 1840 (iv):252.

*Anas boschas*  $\times$  *Anas strepera* = *Anas breweri*, Elliot, 1892:162.

*Anas platyrhynchos* Linnaeus  $\times$  *Anas acuta tzitzihoa* Vieillot. Mallard  $\times$  Pintail.

*Anas boschas*  $\times$  *Dafila acuta*, Coues, 1874:54; Elliot, 1892:161; Suchetet, 1897:639;  
Beyer, 1900:170; Fegler, 1903:303; Bigelow, 1907:383.

Mallard  $\times$  Pintail, Cross, 1890:162.

*Anas boschas*  $\times$  *Anas acuta*, Suchetet, 1896:117.

*Anas platyrhynchos*  $\times$  *Anas acuta*, Ball, 1934:3.

*Anas platyrhynchos platyrhynchos*  $\times$  *Dafila acuta tzitzihoa*, Gunther, 1941:570.

*Anas platyrhynchos* Linnaeus  $\times$  *Anas cyanoptera* Vieillot. Mallard  $\times$  Cinnamon Teal.

Mallard  $\times$  Cinnamon Teal, Maillard, 1902:46.

*Anas platyrhynchos* Linnaeus  $\times$  *Anas carolinensis* Gmelin. Mallard  $\times$  Green-winged Teal.

*Anas boschas*  $\times$  *Nettion carolinensis*, Stone, 1903:209.

*Anas platyrhynchos* Linnaeus  $\times$  *Aythya valisineria* (Wilson). Mallard  $\times$  Canvas-backed Duck.

*Anas boschas*  $\times$  *Fuligula vallisneria*, Baird, 1847:209.

*Anas platyrhynchos* Linnaeus  $\times$  *Mareca americana* (Gmelin). Mallard  $\times$  Baldpate.

*Anas boschas*  $\times$  *Anas americana*, Elliot, 1892:165; Suchetet, 1896:690.

*Anas boschas*  $\times$  *Mareca americana*, Bigelow, 1907:386.

*Anas platyrhynchos*  $\times$  *Mareca americana*, Ball, 1934:3.

*Anas strepera* Linnaeus  $\times$  *Mareca americana* (Gmelin). Gadwall  $\times$  Baldpate.

*Anas strepera*  $\times$  *Anas americana*, Suchetet, 1897:709.

*Mareca penelope* (Linnaeus)  $\times$  *Mareca americana* (Gmelin). European Widgeon  $\times$  Baldpate.

*Mareca penelope*  $\times$  *Mareca americana*, Bailey, 1919:25.

*Anas discors* Linnaeus  $\times$  *Anas cyanoptera* Vieillot. Blue-winged Teal  $\times$  Cinnamon Teal.

*Anas discors*  $\times$  *Anas cyanoptera*, Suchetet, 1897:708.

*Spatula clypeata* (Linnaeus)  $\times$  *Anas cyanoptera* Vieillot or *Anas discors* Linnaeus. Shoveller  $\times$  Cinnamon or Blue-winged Teal.

*Spatula clypeata*  $\times$  *Querquedula cyanoptera* or *Q. discors*, Swarth, 1915:115.

*Spatula clypeata*  $\times$  *Anas discors*, Suchetet, 1897:708.

Shoveller  $\times$  Blue-winged Teal, Deane, 1905:321.

*Aix sponsa* (Linnaeus)  $\times$  *Aythya americana* (Eyton). Wood Duck  $\times$  Redhead.

*Aix sponsa*  $\times$  *Fuligula ferina*, Suchetet, 1897:728.

*Aythya americana* (Eyton)  $\times$  *Anas acuta tzitzioha* Vieillot. Redhead  $\times$  Pintail.

Redhead  $\times$  Pintail, Boardman, 1876:276.

*Fuligula ferina*  $\times$  *Dafila acuta*, Suchetet, 1897:728.

*Aythya collaris* (Donovan)  $\times$  *Aythya americana* (Eyton). Ring-necked Duck  $\times$  Redhead.

*Fuligula affinis*  $\times$  *Fuligula Valismeria* (or *F. americana*), Elliot, 1859:437.

*Fuligula collaris*  $\times$  *Fuligula americana*, Newton, 1880:336; Suchetet, 1897:724.

*Fuligula affinis* (or *F. collaris*)  $\times$  *Fuligula Valismeria* (or *F. americana*), Suchetet, 1897:161.

*Bucephala clangula americana* (Bonaparte)  $\times$  *Lophodytes cucullatus* (Linnaeus). American Golden-eye  $\times$  Hooded Merganser.

*Clangula americana*  $\times$  *Mergus cucullatus* = *Clangula mergiformis*, Cabot, 1854:118;  
Suchetet, 1896:169.

*Bucephala clangula americana*  $\times$  *Lophodytes cucullatus*, Ball, 1934:7.

*Somateria mollissima borealis* (Brehm)  $\times$  *Somateria spectabilis* (Linnaeus). Northern Eider  $\times$  King Eider.

*Somateria mollissima borealis*  $\times$  *Somateria spectabilis*, Krabbe, 1926:543.

*Family Accipitriidae. Kites, Hawks and allies.*

*Accipiter gentilis atricapillus* (Wilson)  $\times$  *Accipiter cooperii* (Bonaparte). Eastern Goshawk  $\times$  Cooper's Hawk.

*Astur atricapillus*  $\times$  *Falco Cooperi*, Suchetet, 1897:470.

*Family Tetraonidae. Grouse and Ptarmigans.*

*Lagopus lagopus* (Linnaeus)  $\times$  *Canachites canadensis* (Linnaeus). Willow Ptarmigan  $\times$  Spruce Grouse.

*Lagopus lagopus*  $\times$  *Canachites camadensis* [sic], Hachisuka, 1928:65.

*Lagopus lagopus*  $\times$  *Canachites canadensis*, Taverner, 1932:89.

*Pedioecetes phasianellus* (Linnaeus)  $\times$  *Dendragapus obscurus* (Say). Sharp-tailed Grouse  $\times$  Dusky Grouse.

*Pediaeocetes phasianellus columbianus*  $\times$  *Dendragapus obscurus richardsonii*, Brooks, 1907:167.

*Pediaeocetes phasianellus columbianus*  $\times$  *Dendragapus obscurus richardsoni*, Hachisuka, 1928:65.

*Pedioecetes phasianellus*  $\times$  *Dendragapus obscurus*, Lincoln, 1950:210-212.

*Pedioecetes phasianellus* (Linnaeus)  $\times$  *Tympanuchus cupido* (Linnaeus). Sharp-tailed Grouse  $\times$  Prairie Chicken.

*Pedioecetes phasianellus columbianus*  $\times$  *Cupidonia cupido* = *Cupidonia cupidini-columbinus*, Brewster, 1877:66.

*Pedioecetes phasianellus*  $\times$  *Cupidonia cupido*, Gurney, 1884:391.

*Pediocetes phasianellus campestris*  $\times$  *Tympanuchus americanus*, Shufeldt, 1893:281.

- Pedioecetes phasianellus* × *Tympanuchus americanus*, Suchetet, 1896:589.  
*Pedioecetes phasianellus campestris* × *Tympanuchus cupido*, Lincoln, 1918:1.  
*Pedioecetes phasianellus* × *Tympanuchus americanus*, Rowan, 1926:336.  
*Pediaecete phasianellus campestris* × *Tympanuchus a. americanus*, Hachisuka, 1928:65.  
*Pedioecetes phasianellus campestris* × *Tympanuchus cupido americanus*, Gross, 1930:97.

*Family Tetraonidae* × *Family Phasianidae*.

*Phasianus colchicus* Linnaeus × *Dendragapus obscurus* (Linnaeus). Ring-necked Pheasant × Dusky Grouse.

- Phasianus torquatus* × *Dendragapus obscurus fuliginosus*, Anthony, 1899:180.  
*Phasianus colchicus torquatus* × *Dendragapus obscurus fuliginosus*, Jewett, 1932:191.

*Phasianus colchicus* Linnaeus × *Tympanuchus cupido* (Linnaeus). Ring-necked Pheasant × Prairie Chicken.

- Phasianus colchicus* × *Tympanuchus cupido*, Lincoln, 1950:210.

*Family Phasianidae. Quails and Pheasants.*

*Callipepla squamata* (Vigors) × *Colinus virginianus* (Linnaeus). Scaled Quail × Bobwhite.

- Callipepla squamata* × *Colinus virginianus*, Suchetet, 1897:470.

*Lophortyx californica* (Shaw) × *Colinus virginianus* (Linnaeus). California Quail × Bobwhite.

- California Quail × Bobwhite, Aiken, 1930:80.

*Lophortyx californica* (Shaw) × *Lophortyx gambelii* Gambel. California Quail × Gambel's Quail.

- Lophortyx californicus* × *Lophortyx gambeli*, Henshaw, 1885:247.  
*Colinus californicus* × *Callipepla gambeli*, Suchetet, 1896:6, 481.  
*Lophortyx californica* × *Lophortyx gambeli*, Hachisuka, 1928:84.

*Lophortyx californica* (Shaw) × *Oreortyx picta* (Douglas). California Quail × Plumed Quail.

- Lophortyx californicus californicus* × *Oreortyx pictus plumiferous*, Peck, 1911:149.  
*Lophortyx californicus* × *Oreortyx* sp., Bailey, 1928:210.  
*Lophortyx californica* × *Oreortyx picta*, Hachisuka, 1928:83.

*Lophortyx gambelii* Gambel × *Callipepla squamata pallida* Brewster. Gambel's Quail × Scaled Quail.

- Gambel's Quail × Scaled Quail, Bailey, 1928:210.

- Lophortyx gambeli* × *Gallipipla* [sic] *squamata*, Hachisuka, 1928:84.

*Family Laridae. Gulls and Terns.*

*Larus leucopterus kumlieni* Brewster. Kumlien's Gull.

- Larus kumlieni* Brewster, Bent, 1921:74; Taverner, 1933:88; Sutton, 1931:158; Gross, 1937:30.

*Larus leucopterus kumlieni*, Bishop, 1944:186.

*Larus leucopterus* × *Larus argentatus thayeri* = *Larus kumlieni*, Dwight, 1925:250.

*Larus hyperboreus* Gunnerus × *Larus argentatus vegae* Palmén. Glaucous Gull × Vega Gull.

*Larus nelsoni*, Henshaw, Bent, 1921:76.

*Larus hyperboreus* × *Larus argentatus vegae* = *Larus nelsoni*, Dwight, 1925:250.

*Family Trochilidae. Hummingbirds.*

*Calypte costae* (Bourcier) × *Selasphorus platycercus* (Swainson). Costa's Hummingbird × Broad-tailed Hummingbird.

*Calypte costae* × *Selasphorus platycercus*, Huey, 1944:636.

*Calypte costae* (Bourcier) × *Archilochus alexandri* (Bourcier and Mulsant). Costa's Hummingbird × Black-chinned Hummingbird.

*Calypte costae* × *Trochilus alexandri*, Thayer and Bangs, 1907:313; Taylor, 1909:293.

*Amazilia violiceps ellioti* (Berlepsch) × *Cynanthus latirostris magicus* (Mulsant and Verreaux). Violet-crowned Hummingbird × Broad-billed Hummingbird.

*Cyanomyia salvini* Brewster, 1893:214.

*Uranomita salvini*, Bishop, 1906:337.

*Amazilia violiceps conjuncta* × *Cynanthus latirostris* = *Amazilia salvini*, Griscom, 1934:378.

*Calypte anna* (Lesson) × *Archilochus alexandri* (Bourcier and Mulsant). Anna's Hummingbird × Black-chinned Hummingbird.

*Trochilus violajugulum* Jeffries, 1888:168.

*Calypte anna* × *Torchilus alexandri* = *Trochilus violajugulum*, Thayer and Bangs, 1907:313.

*Calypte anna* × *Trochilus alexandri*, Taylor, 1909:293.

*Calypte anna* × *Archilochus alexandri* = *Archilochus violajugulum*, Grinnell and Miller, 1944:569.

*Selasphorus rufus* (Gmelin) × *Stellula calliope* (Gould). Rufus Hummingbird × Calliope Hummingbird.

*Selasphorus rufus* × *Stellula calliope*, Thayer and Bangs, 1907:312; Taylor, 1909:293.

*Selasphorus sasin sasin* Lesson × *Calypte anna* (Lesson). Allen's Hummingbird × Anna's Hummingbird.

*Selasphorus floresii* Gould, Emerson, 1901:68; Grinnell and Miller, 1944:569.

*Selasphorus alleni* × *Calypte anna*, Thayer and Bangs, 1907:313; Taylor, 1909:291; Grinnell and Miller, 1944:569.

*Family Picidae. Woodpeckers.*

*Colaptes auratus* (Linnaeus) × *Colaptes cafer* (Gmelin). Yellow-shafted Flicker × Red-shafted Flicker.

*Colaptes ayresi* Audubon, 1843.

*Colaptes hybridus* Baird, 1858.

*Colaptes auratus* × *Colaptes cafer* = *Colaptes hybridus*, Elliot, 1892:161.

*Colaptes auratus* × *Colaptes cafer*, Allen, 1892:21; Rhoads, 1892:325; Eaton, 1893:25; Suchetet, 1897:840; Ridgway, 1909:441; Chapman, 1924:26; Taverner, 1934:34; Deakin, 1936:585; Graber and Graber, 1951:145; Bent, 1939:290; Alexander, 1938:27.

*Colaptes auratus lutens* [sic] × *Colaptes cafer collaris*, Baldwin, 1910:340.

*Colaptes auratus luteus* × *Colaptes cafer collaris*, Bent, 1908:26; Wood, 1923:49.

*Colaptes auratus* × *Colaptes mexicanus*, Suchetet, 1896:429.

*Colaptes chrysoides mearnsi* Ridgway × *Colaptes cafer collaris* Vigors.  
Gilded Flicker × Red-shafted Flicker.

*Colaptes chrysoides* × *Colaptes mexicanus*, Brewster, 1883:25; Suchetet, 1896:435.

*Colaptes chrysoides* × *Colaptes collaris*, Swarth, 1905:27.

Gilded × Red-shafted Flicker, Brenninger, 1898:13.

*Colaptes chrysoides mearnsi* (not hybrids but color dimorphism), Grinnell, 1914:137;  
Bent, 1939:304.

*Dendrocopos nuttalli* (Gambel) × *Dendrocopos pubescens* (Linnaeus). Nuttall's Woodpecker × Downy Woodpecker.

*Dryobates nuttallii* × *Dryobates pubescens gairdnerii*, Ridgway, 1887:521; Suchetet, 1896:437.

#### Family Hirundinidae. Swallows.

*Hirundo rustica erythrogaster* Boddaert × *Petrochelidon pyrrhonota* (Vieillot). Barn Swallow × Cliff Swallow.

*Hirundo horreori-lunifrons* Trotter, 1878:135.

*Hirundo horreorum* × *Petrochelidon lunifrons*, Trotter, 1878:135; Trotter, 1887:309.

*Hirundo erythrogaster* var. *horreorum* × *Petrochelidon lunifrons*, Suchetet, 1896:291.

*Hirundo erythrogaster* × *Petrochelidon lunifrons*, Mearns, 1902:73.

*Petrochelidon pyrrhonota* (Vieillot) × *Iridoprocne bicolor* (Vieillot). Cliff Swallow × Tree Swallow.

*Petrochelidon lunifrons* × *Tachycineta bicolor*, Chapman, 1902:392.

#### Family Paridae. Titmice, Verdins, and Bush-tits.

*Parus atricapillus* Linnaeus × *Parus carolinensis* Audubon. Black-capped Chickadee × Carolina Chickadee.

Black-capped Chickadee × Carolina Chickadee, Chapman, 1924:27.

*Parus atricapillus* Linnaeus × *Parus gambeli* Ridgway. Black-capped Chickadee × Mountain Chickadee.

*Parus atricapillus* × *Parus Gambelli*, Suchetet, 1897:300.

*Parus bicolor* Linnaeus × *Parus atricapillus* Linnaeus. Tufted Titmouse × Black-capped Chickadee.

*Lophophanes bicolor* × *Parus atricapillus*, Ridgway, 1876:169.

*Parus bicolor* × *Parus atricapillus*, Suchetet, 1897:301.

*Parus bicolor* Linnaeus  $\times$  *Parus atricristatus* Cassin. Tufted Titmouse  $\times$  Black-crested Titmouse.

*Parus atricristatus castaneifrons* Sennett, 1887:28.

*Parus bicolor texensis* Sennett, 1887:29.

*Baeolophus bicolor*  $\times$  *Baeolophus atricristatus*, Allen, 1907:468. ....

*Baeolophus bicolor*  $\times$  *Baeolophus atricristatus* Sennetti, Ridgway, 1904:386.

*Family Sylviidae. Warblers, Gnatcatchers, and Kinglets.*

*Regulus calendula* (Linnaeus)  $\times$  *Regulus satrapa* Lichtenstein. Ruby-crowned Kinglet  $\times$  Golden-crowned Kinglet.

*Regulus cuvieri* Audubon, 1832:288.

*Regulus calendula*  $\times$  *Regulus satrapa*, Brewster, 1881:225; Suchetet, 1896:375.

Known only from Audubon's description and figure of the original specimen, killed in June, 1812, on the banks of the Schuylkill River, in Pennsylvania.

*Family Parulidae. Wood Warblers.*

*Vermivora chrysoptera* (Linnaeus)  $\times$  *Vermivora pinus* (Linnaeus). Golden-winged Warbler  $\times$  Blue-winged Warbler.

*Helminthophaga leucobronchialis* Brewster, 1876:1.

*Helminthophila leucobranchialis*, Ridgway, 1882:53; Ridgway, 1885:359; Thurber, 1886:411; Trotter, 1887:307; Richmond, 1895:307; Bishop, 1901:21; Ridgway, 1902:453; Bishop, 1905:24.

*Vermivora leucobranchialis*, Sutton, 1928:206; Watterson, 1928:511; Broun, 1929:214; Cramer, 1931:434; Walkinshaw, 1931:613; Cramer, 1932:355; Campbell, 1934:526; Broun, 1935:320; Olsen, 1935:100; White, 1936:450; Pitelka, 1938:540; Pitelka, 1939:340; Seibert, 1941:410.

Brewster's Warbler, Carter and Howland, 1923:423; Hicks, 1935:168.

*Helminthophaga lawrencei* Herrick, 1874:220.

*Helminthophila lawrenceii*, Osgood, 1907:342; Ridgway, 1902:452.

*Helminthophila lawrencei*, Beebe, 1904:387.

*Vermivora lawrencei*, Tucker, 1928:102; Broun, 1929:213; Brown, 1934:242; Campbell, 1934:526; Meanley, 1944:477.

Lawrence's Warbler, Trotter, 1887:307; Nichols, 1908:86; Roland, 1928:510; Hicks, 1929:43; Hicks, 1935:168.

*Helminthophila lawrencei*  $\times$  *Helminthophila pinus*, Brewster, 1886:411; Ridgway, 1876:169; Ridgway, 1882:53.

*Helminthophila chrysoptera*  $\times$  *Helminthophila pinus*, Fisher, 1885:378; Sage, 1889:279; Suchetet, 1896:319; Bishop, 1905:24; Meeker, 1906:104; Nichols, 1908:86; Ridgway, 1909:441; Faxon, 1911:57; Faxon, 1913:311.

*Vermivora chrysoptera*  $\times$  *Vermivora pinus*, Moore, 1916:202; Morss, 1926:384; Richardson, 1928:46; Pitelka, 1939:340; Carter, 1944:48; Parkes, 1949:48; Parkes, 1951:5.

Blue-winged  $\times$  Golden-winged Warbler, Alexander, 1919:579.

*Vermivora pinus* (Linnaeus)  $\times$  *Oporornis formosus* (Wilson). Blue winged Warbler  $\times$  Kentucky Warbler.

*Helminthophaga cincinnatensis* Langdon, 1880:119.

*Helminthophaga pinus* × *Oporornis formosa* = *Helminthophaga cincinnatiensis*, Ridgway, 1880:237; Suchetet, 1896:345; Ridgway, 1902:446.

*Vermivora pinus* × *Oporornis formosus*, McCamey, 1950:67.

*Vermivora pinus* (Linnaeus) × *Oporornis philadelphia* (Wilson). Blue-winged Warbler × Mourning Warbler.

*Vermivora pinus* × *Oporornis philadelphia*, McCamey, 1950:67.

*Parula americana* (Linnaeus) × *Setophaga ruticilla* (Linnaeus). Parula Warbler × American Redstart.

*Compsothlypis americana* × *Setophaga ruticilla*, Sutton, 1942:153; Burleigh, 1944:292.

*Dendroica coronata* (Linnaeus) × *Dendroica auduboni* (Townsend). Myrtle Warbler × Audubon's Warbler.

*Dendroica coronata* × *Dendroica auduboni*, Taylor, 1911:173; Brodkorb, 1934:243; Mailliard, 1937:223; Monson and Phillips, 1941:108; Packard, 1945:623; Alexander, 1945:623; Tordoff, 1950:80; Gruber and Gruber, 1951:146.

*Dendroica occidentalis* (Townsend) × *Dendroica townsendi* (Townsend). Hermit Warbler × Townsend Warbler.

*Dendroica occidentalis* × *Dendroica townsendi*, Jewett, 1944:23.

*Dendroica dominica* (Linnaeus) × *Parula americana* (Linnaeus). Yellow-throated Warbler × Parula Warbler.

*Dendroica potomac* Haller, 1940:49.

*Dendroica dominica* × *Compsothlypis americana*, Sutton, 1942:151.

*Dendroica striata* (Forster) × *Dendroica castanea* (Wilson). Black-poll Warbler × Bay-breasted Warbler.

*Dendroica striata* × *Dendroica castanea*, Brodkorb, 1934:243.

*Dendroica striata* (Forster) × *Dendroica tigrina* (Gmelin). Black-poll Warbler × Cape May Warbler.

*Sylvia carbonata* Audubon, 1831:308.

*Dendroica carbonata*, Ridgway, 1902:540.

*Dendroica striata* × *Periglossa tigrina*, Brewster, 1881:225; Suchetet, 1896:347.

*Dendroica carbonata* × *Dendroica tigrina*, Coues, 1927:332.

Known only from Audubon's plate and description of two specimens killed near Henderson, Kentucky, in May, 1811.

#### *Family Icteridae. Meadowlarks, Blackbirds, and Troupials.*

*Sturnella magna* (Linnaeus) × *Sturnella neglecta* Audubon. Eastern Meadowlark × Western Meadowlark.

*Sturnella magna* × *Sturnella neglecta*, Chapman, 1924:25.

*Sturnella magna magna* × *Sturnella magna neglecta*, Chapman, 1900:297–320.

*Icterus galbula* (Linnaeus) × *Icterus bullockii* (Swainson). Baltimore Oriole × Bullock's Oriole.

*Icterus galbula* × *Icterus bullockii*, Bent, 1908:29; Sutton, 1942:79; Beecher, 1950:77;  
Graber, 1951:146.

*Icterus galbula* × *Icterus bullocki*, Sutton, 1938:1.

*Quiscalus quiscula* (Linnaeus) × *Quiscalus versicolor* Vieillot. Purple  
Gackle × Bronzed Grackle.

*Quiscalus quiscula aeneus* × *Quiscalus quiscula stonei*, the hybrid population called  
*Quiscalus quiscula ridgwayi*, Chapman, 1936:405; Mayr, 1942:265.

*Quiscalus quiscula* × *Quiscalus aeneus*, Chapman, 1892:1-20; Allen, 1904:467.

Purple Grackle × Bronzed Grackle, Chapman, 1924:26.

*Family Thraupidae. Tanagers.*

*Piranga olivacea* (Gmelin) × *Piranga ludoviciana* (Wilson). Scarlet  
Tanager × Western Tanager.

*Piranga olivacea* × *Piranga ludoviciana*, Tordoff, 1950:3.

*Piranga olivacea* (Gmelin) × *Piranga rubra* (Linnaeus). Scarlet Tanager ×  
Summer Tanager.

*Pyranga erythromelas* × *Pyranga rubra*, Suchetet, 1897:775; McCormick, 1898:302.

*Family Fringillidae. Grosbeaks, Finches, Sparrows, and Buntings.*

*Pheucticus ludovicianus* (Linnaeus) × *Pheucticus melanocephalus* (Swain-  
son). Rose-breasted Grosbeak × Black-headed Grosbeak.

*Hedymeles ludovicianus* × *Hedymelias melancephalus papago*, Swenk, 1930:289; Hud-  
son, 1933:32; Swain, 1933:63; Swenk, 1936:27.

*Pheucticus ludovicianus* × *Pheucticus melanocephalus*, Graber and Graber, 1951:146.

*Passerina cyanea* (Linnaeus) × *Passerina amoena* (Say). Indigo Bunting ×  
Lazuli Bunting.

*Passerina cyanea* × *Passerina amoena*, Breckenridge, 1930:39; Sutton, 1938:5; Beech-  
er, 1950:77; Graber and Graber, 1951:146.

*Spiza americana* (Gmelin) × *Guiraca caerulea* (Linnaeus). Dickcissel ×  
Blue Grosbeak.

*Emberiza townsendii* Audubon, 1834:183.

*Spiza americana* × *Guiraca caerulea*, Coues, 1927:447.

The original specimen, taken May 11, 1833, in Chester County, Pennsylvania,  
remains unique.

*Pinicola enucleator leucura* (Müller) × *Carpodacus purpureus* (Gmelin).  
Pine Grosbeak × Purple Finch.

*Pinicola enucleator* × *Carpodacus purpureus*, Cross, 1890; Thompson, 1894:1,  
Suchetet, 1897:267, 768.

*Acanthis flammea* (Linnaeus) × *Acanthis hornemanni exilipes* (Coues).  
Common Redpoll × Hoary Redpoll.

*Acanthis linaria* × *Acanthis exilipes*, Suchetet, 1897:247.

*Acanthis flammea* (Linnaeus)  $\times$  *Spinus pinus* (Wilson). Redpoll  $\times$  Pine Siskin.

*Aegiothos flavirostris* var. *brewsterii* Ridgway, 1872:433.

*Acanthis brewsterii*, Ridgway, 1885:354.

*Acanthis linaria*  $\times$  *Spinus pinus*, Brewster, 1881:225; Suchetet, 1896:246; Coues, 1927:391.

*Junco aikeni* Ridgway  $\times$  *Junco oreganus* (Townsend). White-winged Junco  $\times$  Oregon Junco.

*Junco aikeni*  $\times$  *Junco oreganus mearnsi*, Miller, 1941:425.

*Junco aikeni*  $\times$  *Junco oreganus*, Miller, 1949:341.

*Junco hyemalis* (Linnaeus)  $\times$  *Junco oreganus* (Townsend). Slate-colored Junco  $\times$  Oregon Junco.

*Junco hyemalis cismontanus*  $\times$  *Junco oreganus montanus*, Miller, 1941:425.

*Junco hyemalis*  $\times$  *Junco oreganus*, Dwight, 1918:295; Monson and Phillips, 1941:110.

*Junco caniceps caniceps* (Woodhouse)  $\times$  *Junco caniceps dorsalis* Henry. Gray-headed Junco  $\times$  Red-backed Junco.

*Junco caniceps caniceps*  $\times$  *Junco caniceps dorsalis*, Miller, 1941:412.

*Junco caniceps caniceps*  $\times$  *Junco oreganus dorsalis*, Miller, 1939:211.

*Junco caniceps*  $\times$  *Junco phaeonotus* = *Junco dorsalis*, Dwight, 1918:300.

*Junco caniceps* (Woodhouse)  $\times$  *Junco oreganus* (Townsend). Gray-headed Junco  $\times$  Oregon Junco.

*Junco oreganus mutabilis* Van Rossem, 1931:325.

*Junco caniceps caniceps*  $\times$  *Junco oreganus thurberi*, Miller, 1939:211; Miller, 1941:412.

*Junco caniceps caniceps*  $\times$  *Junco oreganus mearnsi*, Miller, 1941:412.

*Junco caniceps dorsalis*  $\times$  *Junco oreganus pinosus*, Miller, 1938:92.

*Junco caniceps*  $\times$  *Junco mearnsi*, Van Tyne and Sutton, 1937:110; Monson and Phillips, 1941:110.

*Junco caniceps caniceps*  $\times$  *Junco mearnsi*, Miller, 1939:211.

*Junco caniceps*  $\times$  *Junco thurberi* = *Junco oreganus mutabilis*, Monson and Phillips, 1941:111.

*Spizella pallida* (Swainson)  $\times$  *Spizella breweri* Cassin. Clay-colored Sparrow  $\times$  Brewer's Sparrow.

*Spizella pallida*  $\times$  *Spizella pallida* var. *Breweri*, Suchetet, 1897:274.

*Zonotrichia coronata* (Pallas)  $\times$  *Zonotrichia leucophrys* (Forster). Golden-crowned Sparrow  $\times$  White-crowned Sparrow.

*Zonotrichia coronata*  $\times$  *Zonotrichia leucophrys*, Miller, 1940:45.

*Zonotrichia albicollis* (Gmelin)  $\times$  *Junco hyemalis* (Linnaeus). White-throated Sparrow  $\times$  Slate-colored Junco.

*Zonotrichia albicollis*  $\times$  *Junco hyemalis*, Townsend, 1883:78, Stone, 1893:213; Suchetet, 1897:272, 769.

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