



California Department of Fish and Wildlife

Mourning Dove Banding Report 2021

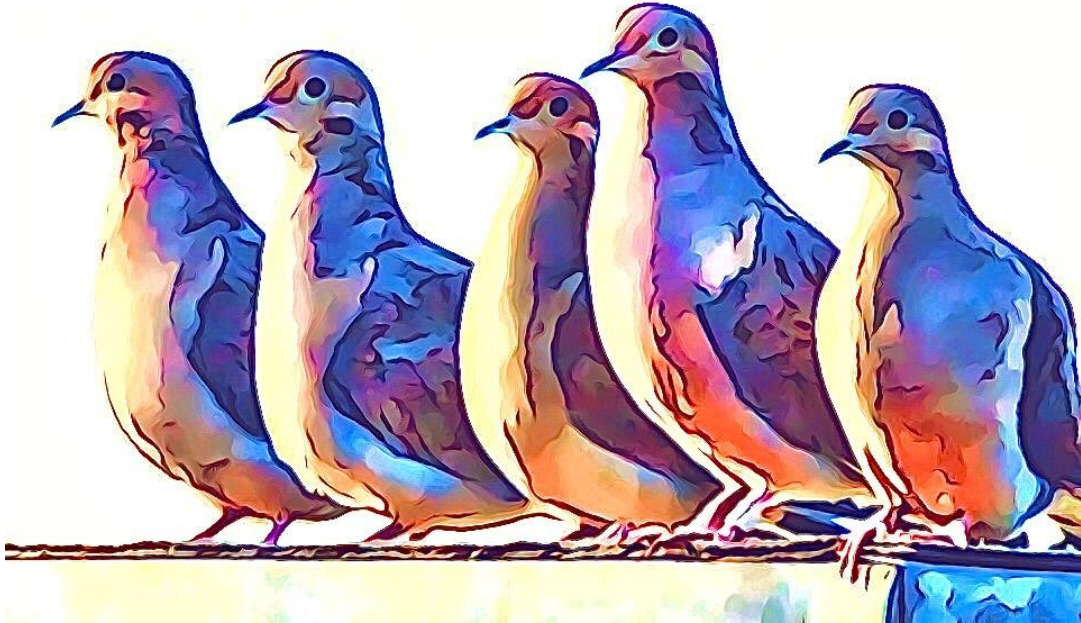


Photo Courtesy of Jon Wheeler

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Overview

The mourning dove banding program managed by the California Department of Fish and Wildlife (hereafter “Department”) is a long-term program that is a critical component of population monitoring for the National Mourning Dove Strategic Harvest Management Plan. The program requires statewide coordination of volunteers from 22 counties and upwards of 100 volunteers. Volunteers include CDFW staff but also represent collaborations between government and non-government organizations and the public. During the 2021 banding season, 2,988 mourning dove (*Zenaida macroura*) were banded (Figure 1) at 50 different trapping sites (Figure 2; Table 2) by 103 banders, up from 1,861 dove, 37 sites, and 49 banders during the 2020 season. Banders classify age of mourning doves based on the presence or absences of buffy tips on the primary coverts. Birds with buffy tips on the coverts are Hatch Year (HY) birds, and were born during 2021. After Hatch Year (AHY) birds lack the buffy tips, and were born before January 2021. Of the banded doves, 42% ($n=1,255$) were hatch year (HY) birds, 56% ($n=1,677$) were after hatch year (AHY) birds, and 2% ($n=56$) were unknown age (Figure 3). Of the adult birds banded, the percentages of males and female were 70% male ($n=1,181$), 25% female ($n=219$), and 5% unknown ($n=77$).

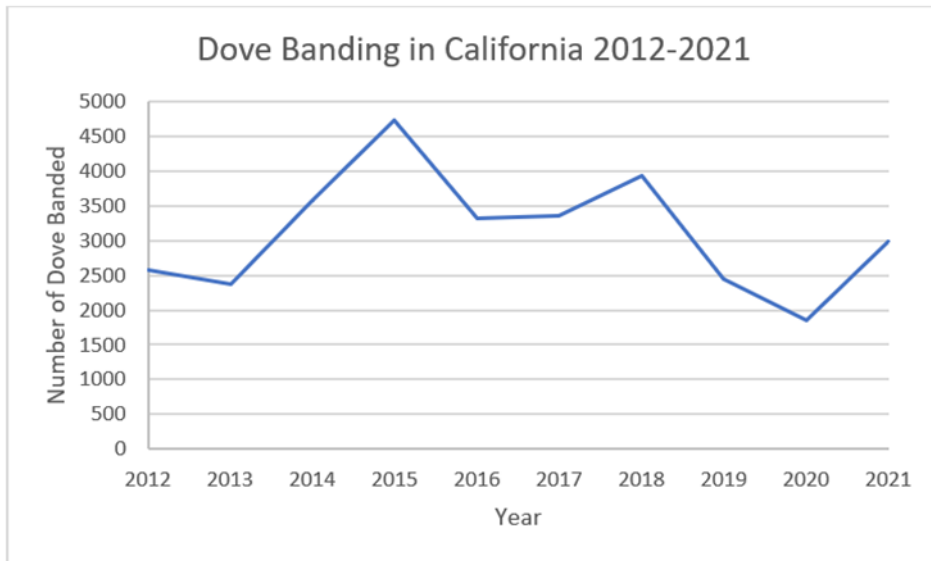
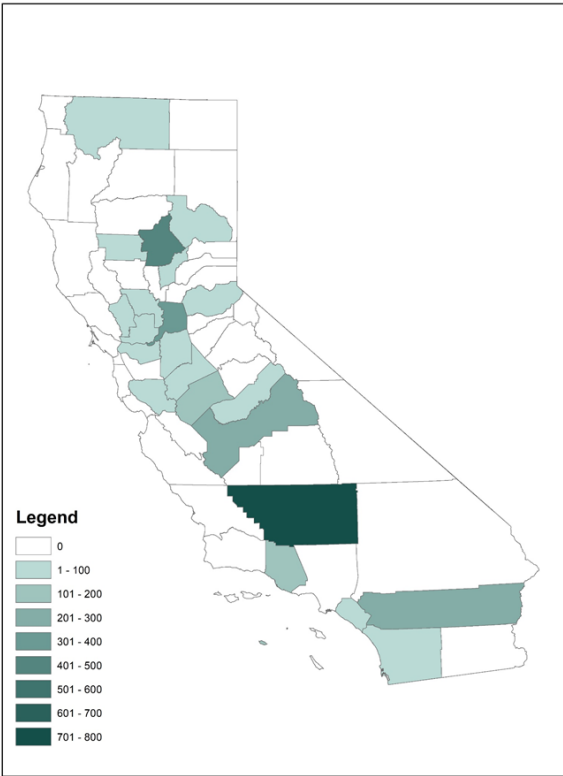


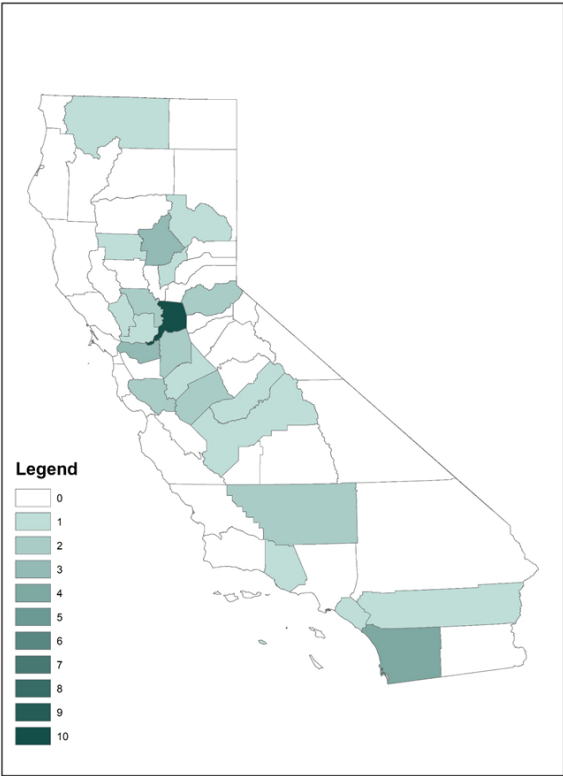
Figure 1: Total number of mourning dove banded in California, 2012-2021.

Table 1: Total number of mourning dove banded in California, 2012-2021.

Year	Dove Banded
2012	2,575
2013	2,368
2014	3,585
2015	4,736
2016	3,323
2017	3,354
2018	3,942
2019	2,439
2020	1,861
2021	2,988
Total	31,171



a)



b)

Figure 2: A) Range of mourning dove banded per county in 2021. B) Number of successful banders per county in 2021. One extremely successful bander accounted for the majority of birds banded in Kern County.

Table 2: Number of banders and total doves banded per county in 2021.

County	Number of Locations	Dove Banded
Butte	3	488
Contra Costa	3	98
El Dorado	2	27
Fresno	1	275
Glenn	1	55
Kern	2	741
Madera	1	19
Merced	2	138
Napa	1	84
Orange	1	100
Plumas	1	35
Riverside	1	219
Sacramento	10	347
San Deigo	4	51
San Joaquin	2	25
Santa Clara	2	12
Siskiyou	1	1
Solano	1	14
Stanislaus	1	56
Ventura	1	126
Yolo	2	54
Yuba	1	6
Total	22	2,971

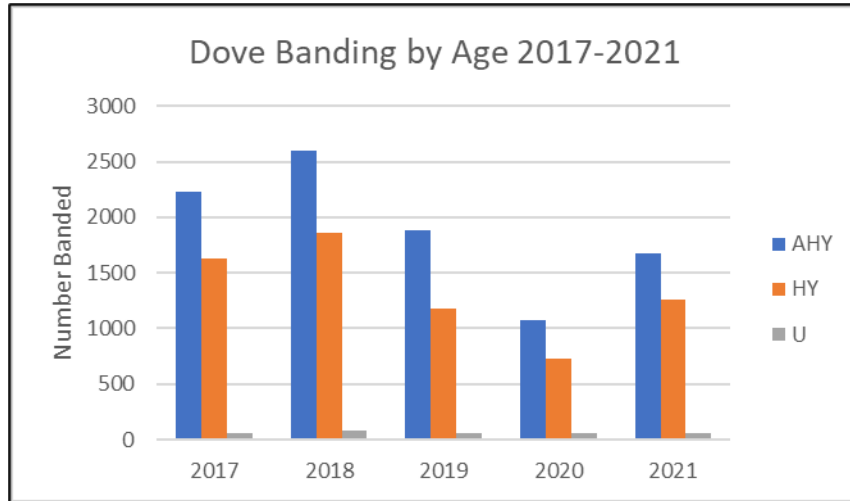


Figure 3: Number of mourning dove banded by age from 2017 to 2021.

Reward Bands

This year marked the third year of a Reward Band Program administered by the US Fish and Wildlife Service. The Mourning Dove Harvest Management Strategy uses banding and recovery data to estimate harvest rate, but because not all bands are reported by hunters, the deployment of reward bands is used to estimate reporting rate. A total of 748 reward bands were deployed during the 2021 banding season in 19 locations compared to 754 reward bands deployed in 13 locations in 2020 and 738 bands in 17 locations in 2019.

Bander Recruitment

The 2021 banding season marked another difficult year for recruitment of new banders into the program; continuation of the pandemic and associated restrictions made in-person trainings unfeasible. However, we were able to recruit 21 new banders into the program, mostly through outreach efforts with the California Waterfowl

Association and the Golden Gate Raptor Observatory. We were also able to reestablish banding activities at a couple of historic sites that had not banded in a number of years, including Oroville Wildlife Area and Spenceville Wildlife Area. The new volunteers met with varying degrees of success (n=0 to n=273 bandings). We are hopeful that additional banding opportunity will be feasible in the Sacramento Wildlife Refuge Complex in the coming year.

Dove banding in Imperial was suspended for the 2020 season due to logistical difficulties for training and housing a scientific aid for the position. However, we were able to reestablish banding operations for the 2021 season by partnering with our Region 6 branch and relying on CDFW biologists. Efforts resulted in banding of 219 mourning dove and 470 white-winged dove (*Z. asiatica*, Figure 4) in our only statewide location for white-winged dove banding. We hope to continue to provide a scientific aide for this site in the future, as well as other potential sites where dove abundance and hunter effort warrant a stronger banding effort.

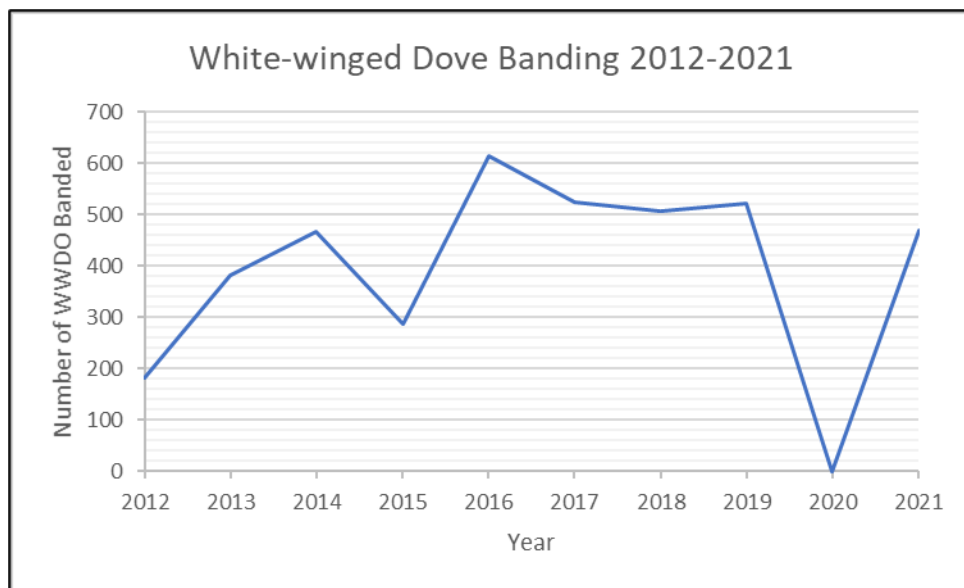


Figure 4: White-winged dove banding numbers in Imperial Wildlife Area 2012-2021.