

Santa Cruz County Breeding Bird Atlas II

Annual Report
Year 5



November 2021

Pigeon Guillemot © Bruce Lyon

THE BREEDING BIRD ATLAS CONCLUDES

Fieldwork for the breeding bird atlas began in spring 2017. Now, five years later, this phase of the project has nearly come to an end. Atlasers have completed about 96% of the fieldwork need to publish the atlas and in doing so, they have spent over 10,000 hours atlasing and have found 23,000 breeding confirmations.

ESPECIALLY NOTABLE OBSERVATIONS IN YEAR 5

- New breeding locations for **Purple Martin**, **Osprey**, **Vaux's Swift**, **Great-tailed Grackle**, and **Peregrine Falcon**.
- **Western Bluebirds** breeding in urban areas in Santa Cruz and Watsonville.
- A **Marbled Murrelet** nest at Big Basin Redwoods State Park.
- Breeding confirmations for **rare breeding species**: Western Kingbird, Horned Lark, Cedar Waxwing, Lawrence's Goldfinch, Black-chinned Sparrow, and Blue Grosbeak.

CZU BIRD STUDY AND FINDING RARE SPECIES

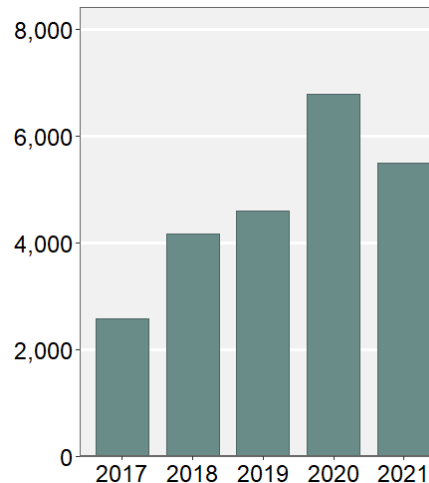
Funding from the County of Santa Cruz Fish & Wildlife Advisory Committee allowed focused fieldwork on rare and hard to find species, leading to new breeding locations being discovered in Year 5.

The committee also funded a study documenting the immediate impacts of the CZU fire on breeding birds. Some initial results are summarized in this [preliminary report](#).

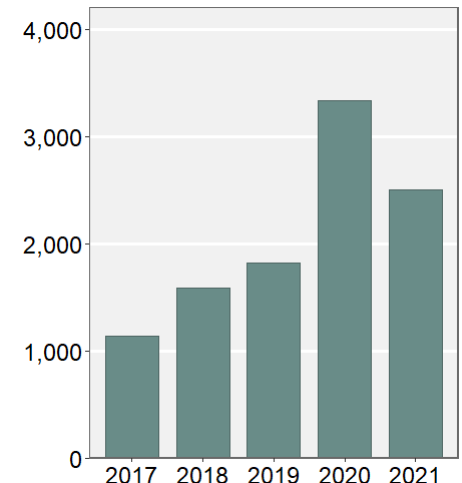


Brandt's Cormorant © Bruce Lyon

BREEDING CONFIRMATIONS

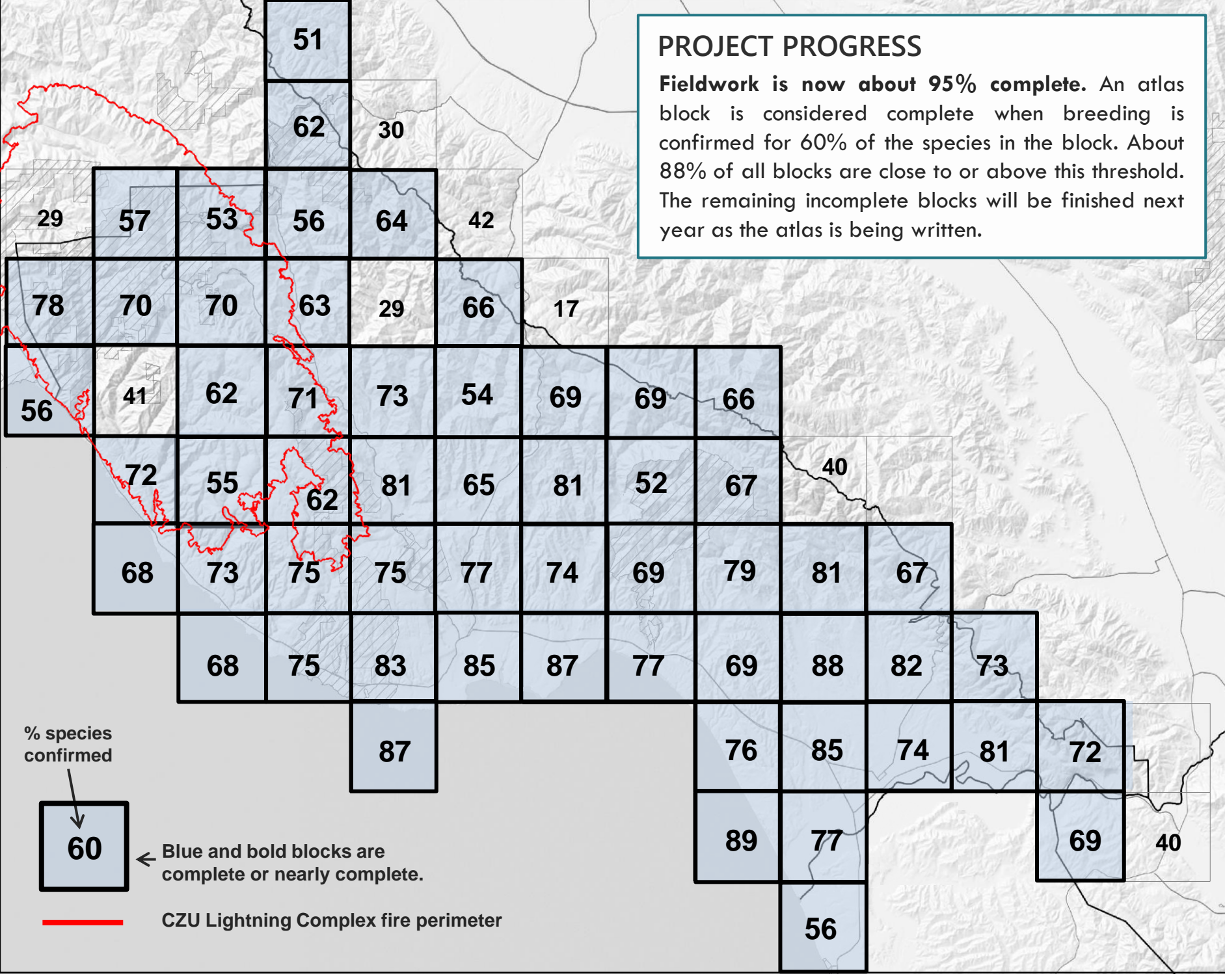


ATLASING HOURS

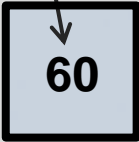


PROJECT PROGRESS

Fieldwork is now about 95% complete. An atlas block is considered complete when breeding is confirmed for 60% of the species in the block. About 88% of all blocks are close to or above this threshold. The remaining incomplete blocks will be finished next year as the atlas is being written.



% species confirmed



Blue and bold blocks are complete or nearly complete.



CZU Lightning Complex fire perimeter

ATLASING HOURS

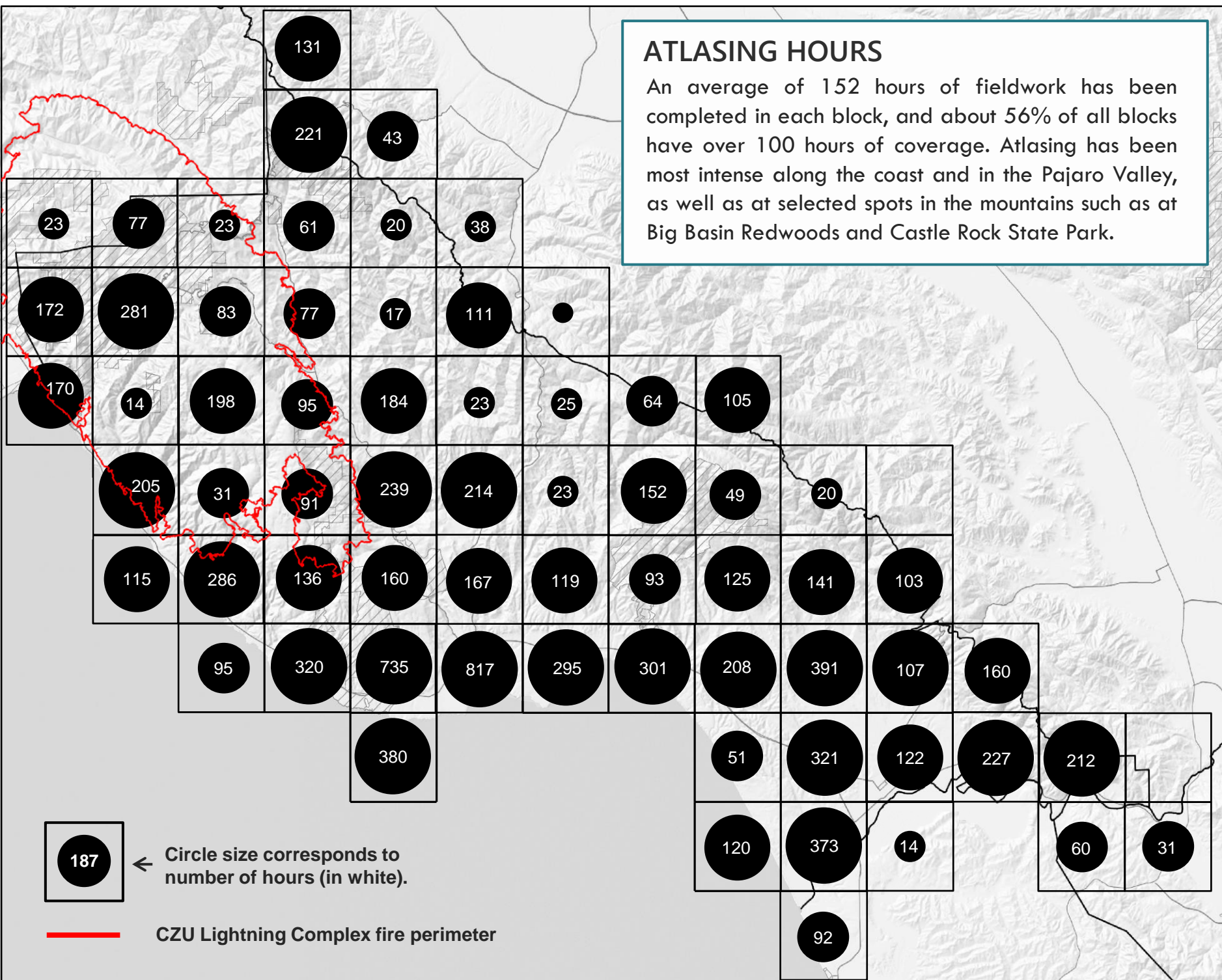
An average of 152 hours of fieldwork has been completed in each block, and about 56% of all blocks have over 100 hours of coverage. Atlasing has been most intense along the coast and in the Pajaro Valley, as well as at selected spots in the mountains such as at Big Basin Redwoods and Castle Rock State Park.



← Circle size corresponds to number of hours (in white).



CZU Lightning Complex fire perimeter



BREEDING CONFIRMATIONS




Atlas fieldwork has reached into almost all areas of Santa Cruz County. This map shows where the 22,000 breeding confirmations have been found since 2017. A breeding confirmation is an observation of behavioral evidence that confirms a bird is breeding at a specific location.

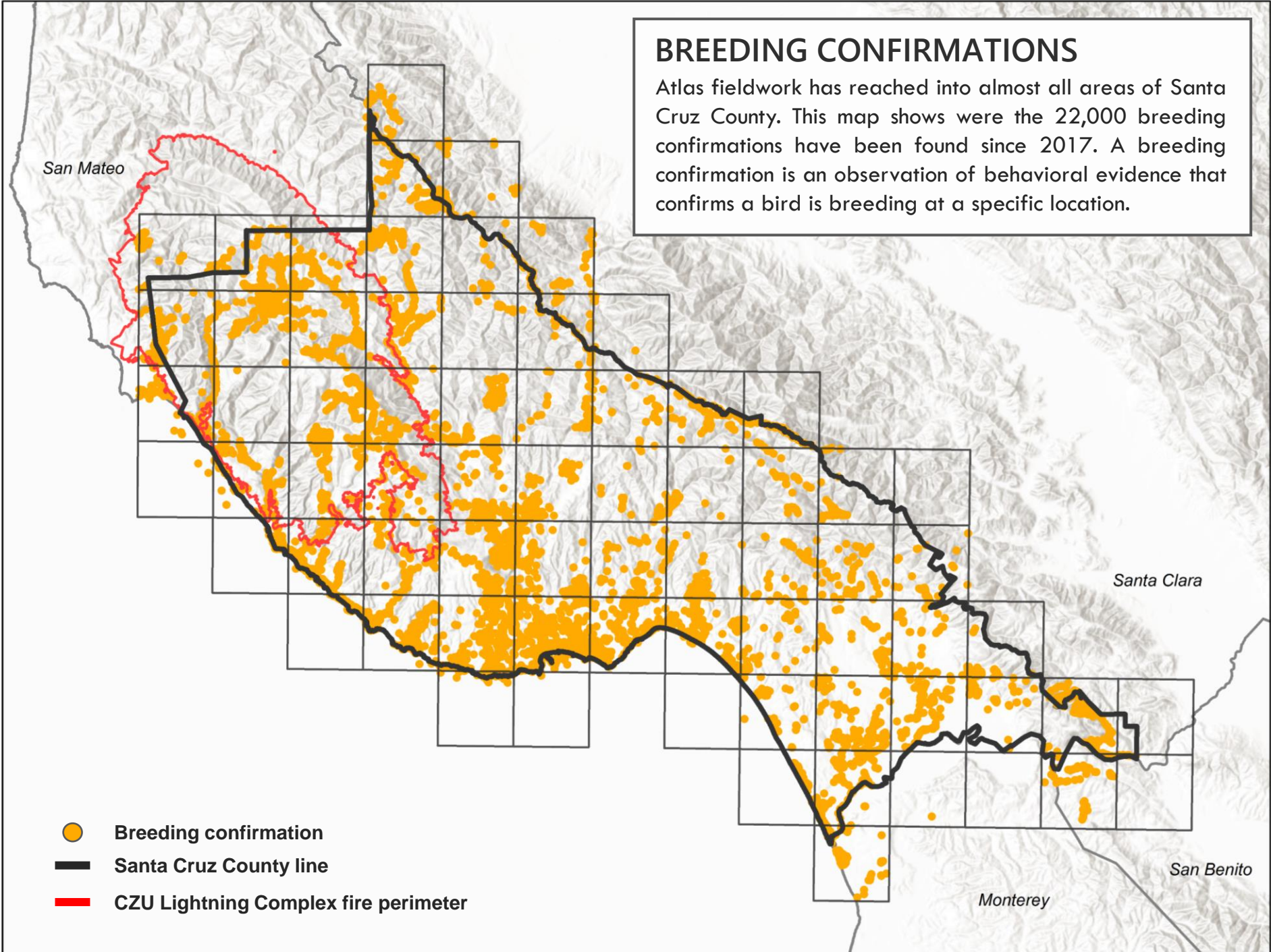
San Mateo

Santa Clara

San Benito

Monterey

-  Breeding confirmation
-  Santa Cruz County line
-  CZU Lightning Complex fire perimeter



VOLUNTEERS

The atlas has always been supported by a large contingent of volunteers. Since the beginning of the project, **105 volunteers** have submitted observations as well as **10 groups** working with birds in the atlas project area. A sincere thanks to all who have contributed their time and observations to the atlas.



Black Swifts
© Bruce Lyon

OBSERVERS *Names in **bold** are those who contributed observations in at least four years.*

Robin Abu-Shumays

RJ Adams

Nanci Adams

Jenny Anderson

Jasper Barnes

Jo Ann Baumgartner

Bonnie Bedzin

Bill Bousman

Ann Brohmer

Jessica Brohmer

Perry Brohmer

Tracy Brookshier

Phil Brown

Kristin Brunk

Brian Bullard

Lleni Carr

Bryan Cockel

Kaia Colestock

Larry Corridon

Nanda Currant

Judy Donaldson

Hannah Doniach

David Ekdahl

John Ellis

Gilles Faggio

Vivian Fenner-Evans

Craig Fosdick

Elisabeth Foster

Aaron Gabbe

Lois Goldfrank

Peggy Gotthold

Richard Griffith

Jessica Guenther

Zach Hampson

Cole Heim

Sharon Hull

Lee Jaffe

Jazmine Jensen

Kent Johnson

W&I Jolliffe

Tim Jolly

Surrey Kent

Kevin Kilpatrick

Spencer Klinefelter

Storey La Montagne

Seraphina Landgrebe

June Langhoff

Lisa Fay Larson

Inger Marie Laursen

Earl Lebow

Margaret Leonard

Nicholas Levendosky

Juliette Linossier

Bruce Lyon

Jenn Mahley

Jeff Manker

Stephanie Martin

Amelia Maurer

Bobbie Mayer

Brian McElroy

Jennifer McNulty

Don Miller

Jane Mio

Liam Murphy

Shirley Murphy

Sophie Noda

Jane Orbuch

Vivienne Orgel

Amy Patten

Carol Pecot

Sandi Pensinger

Margaret Perham

Bernadette Ramer

Bob Ramer

Alex Rinkert

Barbara Riverwoman

Richard Sandkuhle

Rusty Scalf

Christian Schwarz

Elena Scott

Lisa Sheridan

Tomoko Shimotomai

David Sidle

Stephanie Singer

Logan Southall

Anne Spence

Madeline Spencer

Kitty Stein

Howard Stephenson

David Suddjian

Peter Svensson

Jonah Svensson

Hanna Svensson

Scott Terrill

Tim Thompson

Simon Thornhill

Matthew Timmer

Norman Uyeda

Elizabeth Van Dyke

Connie Vigno

Jonny Wahl

Randy Wardle

Jim Williams

Melanie Wirtanen

Amy Yee

CONTRIBUTING GROUPS

Quail Hollow Nest Box Project

DeAnza Nest Box Project

UCSC Nest Box Project

Bay Heights Nest Box Project

Pasatiempo Nest Box Project

Wild Farm Alliance

Santa Cruz Predatory Bird Research Group

Younger Lagoon Reserve Bird Banding Station

CZU nesting bird biologists

iNaturalist community

SUPPORT

Funding for the atlas has been provided by many generous supporters. These funds support the organization of fieldwork and will allow for the timely publication of the atlas. Over 95% of the species in our Sponsor-a-Species fundraising campaign have now been sponsored!



American Robin © Bruce Lyon

Thank you for sponsoring a species!

Acorn Woodpecker	Susan Miracle	Canyon Wren	Ann Rogers
Allen's Hummingbird	Glen Tepke	Cassin's Vireo	Matthew Strusis-Timmer
American Goldfinch	Larry Corridon	Cedar Waxwing	Mari Tustin
American Kestrel	Surrey Kent	Chestnut-back. Chickadee	Debbie Diersch
American Avocet	Jennifer McNulty	Chipping Sparrow	Lois Goldfrank
American Bittern	Larry Corridon	Cinnamon Teal	Kathleen Toner
American Coot	Mary Crouser	Cliff Swallow	Richard Moss
American Crow	David Suddjian	Common Merganser	Judy Donaldson
American Dipper	Thomas Sutfin	Common Poorwill	David Suddjian
American Robin	Mary Crouser	Common Raven	Mary Crouser
Anna's Hummingbird	Rich Griffith & Margaret Perham	Common Yellowthroat	Jenny Anderson
Ash-throated Flycatcher	Robin Abu-Shumays	Cooper's Hawk	Rich & Heidi Sandkuhle
Bald Eagle	Gary Kittleson	Dark-eyed Junco	Debbie Diersch
Band-tailed Pigeon	Robert Stephens	Double-cr. Cormorant	Jane Ann Harper
Barn Owl	Steven Penrose	Downy Woodpecker	Rich Griffith & Margaret Perham
Barn Swallow	Mary Crouser	Eurasian Collared-Dove	Mary Crouser
Bell's Sparrow	David Lavorando	European Starling	Mary Crouser
Belted Kingfisher	Steve Leonard	Gadwall	Norman Uyeda
Bewick's Wren	Julia Jackson	Golden Eagle	Debi Shearwater
Black Oystercatcher	Jenny Anderson	Golden-crowned Kinglet	Kevin Kilpatrick
Black Phoebe	Mary Crouser	Grasshopper Sparrow	Phil Brown
Black Swift	Stephanie Martin	Great Blue Heron	Rich Griffith & Margaret Perham
Black-chinned Sparrow	Jordana Langlois	Great Egret	Bob & Bernadette Ramer
Black-crown. Night Heron	Mary Crouser	Great Horned Owl	Kevin Lohman
Black-Headed Grosbeak	David Ekdahl	Green Heron	Lisa Sheridan
Black-necked Stilt	Andrew Hogan	Hairy Woodpecker	Rich Griffith & Margaret Perham
Black-thr. Grey Warbler	Phil Brown	Hermit Thrush	Nancy Collins
Blue Grosbeak	Erika Perloff	Hermit Warbler	Kent Johnson
Blue-gray Gnatcatcher	Elisabeth Foster	Hooded Oriole	Nick Levendosky
Brandt's Cormorant	Mari Tustin	Horned Lark	Kathleen Toner
Brewer's Blackbird	Liz Chapman	House Finch	Mary Crouser
Brown Creeper	Elizabeth Chapman	House Sparrow	Pam Iriguchi
Brown-headed Cowbird	Mary Crouser	House Wren	Bethany Kilzer
Bullock's Oriole	David Somerton	Hutton's Vireo	Phil Brown
Bushtit	Sylvia Patience	Killdeer	Rich Griffith & Margaret Perham
California Quail	Jane Orbuch & Bryan Cockel	Lark Sparrow	Mari Tustin
California Scrub-Jay	Mary Crouser	Lawrence's Goldfinch	Nico Schnack
California Thrasher	Jennifer McNulty	Lazuli Bunting	Terence Degan
California Towhee	Patricia Bacchetti	Lesser Goldfinch	Karen Laing
Canada Goose	Ann Chandler and Joe Mikulsky	Long-eared Owl	Andrew Kenny

SUPPORT *continued*

Thank you for sponsoring a species!

MacGillivray's Warbler	Glen Tepke	Vaux's Swift	Stephanie & Steve Singer
Mallard	Mary Crouser	Violet-green Swallow	Nancy Collins & Pete Solé
Marbled Murrelet	Stephanie & Steve Singer	Warbling Vireo	Lisa Larson
Mourning Dove	Alison Brohmer	Western Bluebird	Amanda Preece
Northern Flicker	Deborah Goodell	Western Gull	Jasper Barnes
No. Rough-wing. Swallow	Phil Brown	Western Kingbird	Debbie Goodell
Northern Harrier	Tim Thompson	Western Meadowlark	Mary Crouser
Northern Mockingbird	Mary Crouser	Western Tanager	Matthew Strusis-Timmer
Northern Pygmy Owl	Judy Donaldson	Western Screech-Owl	Jasper Barnes
Northern Saw-whet Owl	Stephanie & Steve Singer	Western Wood-Pewee	Joanne & Andy Hogan
Nuttall's Woodpecker	Rich Griffith & Margaret Perham	White-crown. Sparrow	Larry Corridon
Oak Titmouse	Dan Frisch	White-tailed Kite	Jeff Manker
Olive-sided Flycatcher	Bonnie Bedzin	White-throated Swift	Breck Tyler
Orange-crowned Warbler	Tim Jolly	Wild Turkey	Lois Goldfrank
Osprey	Mary Crouser	Wilson's Warbler	Michael O'Malley
Pacific Wren	Glen Tepke	Wood Duck	Mary Crouser
Pacific-Slope Flycatcher	Janice Lasnier	Wrentit	Ketury Stein
Pelagic Cormorant	Alexander Gaguine	Yellow Warbler	Keffi Bell
Peregrine Falcon	Sharon Hull	Yellow-rump. Warbler	Ann Chandler and Joe Mikulsky
Pied-Bill Grebe	Mary Crouser		
Pigeon Guillemot	Phil Brown		
Pileated Woodpecker	Glen Tepke		
Pine Siskin	Rich Griffith & Margaret Perham		
Purple Finch	Karen Burnson		
Purple Martin	Alex Rinkert		
Pygmy Nuthatch	Robert Stephens		
Red-breasted Nuthatch	Louisa Squires		
Red-breasted Sapsucker	Rich Griffith & Margaret Perham		
Red-shouldered Hawk	Jacquelyn Pio		
Red-tailed Hawk	Lynda Lewit		
Red-winged Blackbird	Ann Chandler and Joe Mikulsky		
Rock Pigeon	Mary Crouser		
Ruddy Duck	Louisa Squires		
Savannah Sparrow	Joanne & Andy Hogan		
Sharp-shinned Hawk	Rich Griffith & Margaret Perham		
Snowy Egret	Ann Chandler and Joe Mikulsky		
Snowy Plover	Rich Griffith & Margaret Perham		
Song Sparrow	Surrey Kent		
Sora	Shirley Murphy		
Spotted Sandpiper	Rich Griffith & Margaret Perham		
Spotted Towhee	Elisabeth Foster		
Steller's Jay	Mary Crouser		
Swainson's Thrush	Pamela King		
Tree Swallow	Robert Stephens		
Tricolored Blackbird	Nick Levendosky		
Turkey Vulture	Mary Crouser		
Varied Thrush	Mari Tustin		

ADDITIONAL SUPPORTERS

Jerry Busch	Barry McLaughlin
Teresa Green	Richard Sandkuhle
Susan Leo	Cathy Summa-Wolfe
Joanne Madril	



American Robin © Bruce Lyon

BREEDING BIRD ATLAS II

sponsored by the

Santa Cruz Bird Club



The Santa Cruz Bird Club is a 501(c)(7) non-profit whose mission is to unite those who have a common interest in wild birds, that they may better study and conserve them.

ORGANIZATION

Alex Rinkert

Project Director

Stephanie Singer

Lisa Sheridan

Phil Brown

Project Management

Simon Thornhill

Data Management

Bruce Lyon

Photography

Alex Rinkert

Rusty Scalf

Maps

Stephanie Singer *Chair*

Larry Corridon

Elisabeth Foster

Lisa Fay Larson

Brendan Quirk

Fundraising Committee

San Francisco Bay

Bird Observatory

Fiscal Sponsor



major support provided by

Phil Brown

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Mary Crouser

Deborah & Jerome Goodell

Richard Griffith & Margaret Perham

Shirley Murphy

Jane Orbuch & Bryan Cockel

Bob & Bernadette Ramer

Richard & Heidi Sandkuhle

Debra Love Shearwater

Lisa Sheridan

Pete Solé & Nancy Collins

Stephanie & Steve Singer

Robert Stephens

Glen Tepke

Mari Tustin

Anonymous

and

County of Santa Cruz Fish & Wildlife Advisory Committee

Community Foundation Santa Cruz County



Cliff Swallows © Bruce Lyon