Strengthen the conservancy of native felid populations within local and global ecosystems, using innovative approaches to research, education and community stewardship.

HTTP://FELIDAEFUND.ORG/
WHY WE FOCUS ON CATS

GLOBAL WILD FELID POPULATIONS ARE DECLINING PRECIPITOUSLY

ALL 37 WILD FELID SPECIES HAVE MATCHING CHALLENGES:

- LOSS OF HABITAT
- HUMAN ACTIVITY
- CONFLICT

WILD FELIDS ARE ECOSYSTEM ENGINEERS AND INDICATOR SPECIES, CRITICAL TO ECOSYSTEM HEALTH AND BIODIVERSITY
Conducting research on wild cats and disseminating this research to support wild cat conservation and to advance the field of wild cat research.

Building community stewardship through research, communication and education projects that engage local residents in protection of the environments they live in and the wild cats they live beside.

Engaged Communities
(Bay Area Puma Project)
Kings Mountain, La Honda, Henry Coe
Serving 22,000 people
Engaging school-aged children, college students and concerned communities through curricula and presentations that deeply inform individuals about their local wild felid species and their needs, stressors and conservation status.

50+ SCHOOLS AND COLLEGES

250+ CLASSES

9,500+ STUDENTS REACHED
SPECIES CONTRIBUTIONS TO RESEARCH AND PUBLISHED ARTICLES AND PAPERS:

SNOW LEOPARD IN PAKISTAN AND MONGOLIA (2006 - 2011)
ARABIAN LEOPARD AND CARACAL IN OMAN (2011)
FISHING CAT IN THAILAND (2008)
LEOPARD CAT, BAY CAT, FLAT-HEADED CAT, MARBLED, CLOUDED LEOPARD IN BORNEO (2008 - 2011)
ANDEAN MOUNTAIN CAT, GEOFFREY’S CAT, MARGAY, OCELOT, PAMPAS CAT IN ARGENTINA ANDES (2012 - 2016)
JAGUARUNDI IN ARGENTINA (2017 - PRESENT)
CHEETAH IN TSAVO, KENYA AND NAMBIA (2015 - PRESENT)
PUMAS (AKA MOUNTAIN LIONS) IN NORTH AMERICA AND SOUTH AMERICA (2006 - PRESENT)
GEOFFREY’S CAT, AND PAMPAS CAT IN ARGENTINA (2015 - PRESENT)
BOBCATS IN THE SAN FRANCISCO BAY AREA (2008 - PRESENT)
Long-term study of the Bay Area's pumas, their habitats and conflict with humans. Combines research, outreach, education, and community stewardship programs involving citizen science – ALL to preserve pumas in the wild and along the wildland-urban edge.
EFFECTS OF LAND USE CHANGE AND PREY ABUNDANCE ON PUMA BODY CONDITION

*Landscape and Urban Planning Coon et al.* - Assessing puma body condition along the urban-wildland interface using remote sensing trail camera imagery. Findings revealed that pumas in moderately developed areas (golf courses, cemeteries, moderate housing density) have better body condition and may benefit from anthropogenic subsidies.

PREDICTORS OF PUMA OCCUPANCY IN HIGHLY FRAGMENTED LANDSCAPE

*Wildlife Biology - Coon et al* - Using remote camera data to identify preferred puma habitat for hunting. Findings showed that prey vulnerability is more important than prey availability in urban landscape and maintaining connectivity between forested habitats is critical.

ENVIRONMENTAL AND ANTHROPOGENIC CORRELATES OF ROADKILL DISTRIBUTION AT THE WILDLAND-URBAN INTERFACE

*Journal of Wildlife Management - Kreling et al.* - Using roadkill data from the Road Ecology Center at U.C. Davis and traffic volume data from CALTrans to examine spatial and temporal predictors of roadkill on large mammals on a major highway in urban SF Bay Area. Findings showed that hard boundaries and the wildland-urban interface may be zones of high risk for dispersing animals, and citizen science datasets are valuable for monitoring human-wildlife conflict.
**RESEARCH UNDERWAY**

**MARIN BOBCAT STUDY**

Uses data collected from remote sensing trail cameras and feces, this study, in partnership with Oregon State University, focuses on bobcat health and toxicology, as well as baseline occupancy and density in Marin County, CA where scarce puma presence may have effects on overall health and density of bobcats.

**PUMA HABITAT FRAGMENTATION ANALYSIS**

Uses remote sensing camera data to determine critical patch size and characteristics, for pumas in the greater San Francisco Bay Area to distinguish vulnerable patches that are required for species connectivity, and therefore important to protect from development.
Community Camera Studies are designed to engage local residents in areas with puma presence in stewardship of these areas and the wild cats they support. The program aims to:

- Reduce fear
- Contribute to Bay Area Puma Project data set
- Eliminate "myths" about pumas
- Develop appreciation for the ecosystem services pumas provide
- Recognize of the vulnerability of this species in an ever-developing human landscape

- LA HONDA COMMUNITY CAMERA STUDY
  COMMUNITY OF 2,400 – JUNE 2018 - JUNE 2019

- KINGS MOUNTAIN COMMUNITY CAMERA STUDY
  COMMUNITY OF 5,500 – JUNE 2019 - JUNE 2020

- HENRY COE STATE PARK COMMUNITY CAMERA STUDY*
  COMMUNITY OF 50,000+ – JUNE 2019 - JUNE 2020

*Establishing a baseline distribution of pumas in a wilderness area near an urban center.
OUTREACH AND EDUCATION

CONNECTIVITY CONFERENCE WITH UC DAVIS ROAD ECOLOGY CENTER IN 2015

POSTER PRESENTATION AT ICOET (INTERNATIONAL CONFERENCE ON ECOLOGY AND TRANSPORTATION) IN 2019

360 LECTURES AND PRESENTATIONS SINCE 2006 AT SEVERAL CONFERENCES, PRIVATE EVENTS AND TO THE PUBLIC
Working with partners in several areas where ranch lands and wildlands intersect, this program aims to document puma distribution and conflict with ranchers in order to provide mitigation solutions that offer economic incentives. The projects also record the presence of other wild cat species in the study areas.

Pumas have returned to the Peninsula Valdes after being largely driven out or killed by ranchers. This study aims to create the first comprehensive catalog of puma distribution on the Peninsula with a particular focus on their interaction with livestock compared to natural prey, in order to better understand reasons for conflict and how to mitigate conflict through economic incentives.
ARGENTINE ESPINAL

PUMAS AT THE EDGE

OUR PROJECT HAS ALREADY BEEN ABLE TO PRODUCE:

- A landscape-scale puma habitat suitability map (Caruso et al 2015),
- an assessment of the effect of habitat modification on its use of habitat at landscape scale (Caruso et al. 2016) and we are working right now on a similar model at a more local scale, where other variables become relevant,
- a characterization and quantification of the effect of puma predation on livestock (which will be published as a chapter for a book on felid-human conflict in Latin America), based on a large database of interviews
- an analysis of the causes and effects of puma-livestock conflicts (to be included in a manuscript that we are currently writing).
Additionally, during the last 2 years, we have produced some ancillary outputs, such as:

- a scientific paper published in Oryx on the reliability of local people reports on carnivore presence (Caruso et al. 2016b)
- 2 notes on our project in Wild Felid Monitor
- a scientific paper (submitted) on jaguarundi distribution and abundance in our area
- 4 participatory workshops, which represented the first opportunity for local ranchers to share their thoughts and worries on the conflict issue
- 2 poster presentations in the congress of the Italian Mammal Society (ATIT)
- 1 oral presentation in a Veterinary congress in Argentina
- 1 poster presentation in a Landscape Ecology congress in Argentina
- 1 oral presentation and 1 poster in the congress of the Argentine Mammal Society (SAREM)
- 8 interns joined the project over 3 years, comprising graduate and post graduate students from Canada (University de Sherbrooke) and Italy.
SURPLUS KILLING BY PUMAS (PUMA CONCOLOR): RUMORS AND FACTS

(Lucherini et al. 2018) The Mammal Society. Surplus killing by pumas in Argentina's rangelands is more likely to occur when the pumas ‘normal’ hunting sequence is disrupted.

CHARACTERIZATION OF PUMA—LIVESTOCK CONFLICTS IN RANGELANDS OF CENTRAL ARGENTINA

(Guerisoli et al. 2017) Royal Society Open Science. Conflicts in areas of puma-livestock depredation. Mitigation of conflict in Argentina is not only about reducing damage but also about increasing tolerance.

DISTRIBUTION AND POPULATION STATUS OF JAGUARUNDI

- Jaguarundi distribution in the Buenos Aires Province of Central Argentina.
- Pumas have returned to the Peninsula Valdés after being driven out and overhunted. The study will provide a comprehensive catalog of puma distribution with a focus on conflict mitigation, in this eco tourism supported region.
This critical area for cheetah hosts one of the largest population groups of the remaining 8,000 to 12,000 cheetahs in the wild. With only 1,000 estimated to inhabit Kenya, this population of approximately 600 is the largest single group. Human-wildlife conflict continues to increase though strides have been made in areas where Tsavo Cheetah Project's community education programs have been conducted.

Community Education - 5,400+ students have received in-class and field curricula that introduces this wild cat and its many services to nature. It also demonstrates the rarity of cheetah predation on livestock and assists children to teach parents how best to protect livestock in cheetah country.
Felidae has hosted 50+ interns conducting and/or assisting with research working remotely using our data sets, working in the field with our biologists and working at our office where data management is undertaken. 50% of the Felidae Interns have published research articles using our research, data and being mentored by our biologists.
COMMUNITY STEWARDSHIP & ENGAGEMENT
Community program offering dissemination of meta research data findings, in addition to stories and visuals from our work in the field. Community programs raise awareness with the public around pumas and their ecosystem role. We present information on the biology, ecology and distribution of this important and threatened keystone species.

Our programs and presentations have reached more than 135,000 people across the US and British Columbia. Lectures and presentations have been provided at more than 200 libraries, conferences, scientific institutions, agencies, community centers, zoos and corporations since 2006.

FELIDAE HAS ALSO PRESENTED AT MORE THAN 300 SYMPOSIA AND CONFERENCES FOCUSED ON WILDLIFE, RESEARCH METHODOLOGY AND FELIDS.
Felidae engages local residents in the science undertaken as well as in our community-awareness building. This Program, Wilde Backyard, invites residents to manage research cameras set in a research grid to encourage their participation and voice for wild felids in news media communications, on Nextdoor and with local management agencies to lessen human-wildlife conflicts and the spread of inaccurate information about pumas and bobcats.
This modular curriculum offers school classrooms an introduction to biodiversity through the lens of the puma and bobcat. With a greater focus on the puma, the curriculum offers a lecture with videos, images, illustrations and graphics that present the puma and its magnificent role in supporting ecosystems. A lab invites students to learn about data analysis and predator-prey dynamics using the Lokta Volterra equations. A half day field trip takes students to a local wildlife area where pumas are present and our field biologists teach students about the research, how to track, identify puma sign, and understand the role of the puma in the local landscape.
DATA

FELIDAE'S DATABASE, WILDEPOD IS NOW CLOUD-BASED AND HAS NEARLY 4M CATALOGUED IMAGES AND VIDEOS; AN ADDITIONAL 2M IMAGES AND VIDEOS ARE IN CUE FOR PROCESSING. THIS IS THE LARGEST REPOSITORY OF TERRESTRIAL ANIMAL IMAGERY COLLECTED FOR THE BAY AREA’S NINE COUNTIES.

ONCE IN THE CLOUD, FELIDAE WILL MAKE DATA AVAILABLE TO RESEARCHERS.
Felidae is currently utilizing AI and machine learning tools to process data and will soon use it to identify species and to customize automated neighborhood feeds and stats. Wilde Backyard will be developed as an App in 2020.
THE FACES
BEHIND FELIDAE
OUR DYNAMIC TEAM INCLUDES:

ZARA MCDONALD MS/MBA/RESEARCHER & PRESIDENT

COURTNEY COON PHD PRINCIPAL BIOLOGIST INVESTIGATOR

DAVE STONER PHD PRINCIPAL SCIENTIFIC INVESTIGATOR

GINGER THOMSON, MBA EXECUTIVE DIRECTOR

BRAD NICHOLS, MS WILDLIFE BIOLOGIST

MICHAEL LAND TECHNOLOGY DEVELOPER

CHERIE SCROFF PRINCIPAL INVESTIGATOR TSAVO CHEETAH PROJECT

MEGAN BORTNER BOOKKEEPER

ALLY NAUER BIOLOGIST

TANNER SAUL BIOLOGIST

CAT GALLO OFFICE/VOLUNTEER MANAGER

IN MEMORY OF ERIC YORK
THANKS TO OUR SUPPORTERS

ACCOLADE FILM FESTIVAL
AUDUBON CANYON RANCH
AUDUBON SOCIETY
BAKERSFIELD FILM FESTIVAL
BELVEDERE TIBURON LIBRARY
BIG CAT RESCUE
BROWNING FOUNDATION
CA DEPT OF FISH AND WILDLIFE
CADE WINERY
CAL ACADEMY OF SCIENCE
CAL POLY
CAL TRANS
CALIFORNIA STATE PARKS
CAMPBELL FOUNDATION
CATS MEOW FOUNDATION
CITY OF OAKLAND
CONNECTIVITY FOR WILDLIFE
CONSERVACION PATAGONICA
CONSERVATION, FOOD AND HEALTH FOUNDATION
CONTRA COSTA WATER DISTRICT
COYPU FOUNDATION TRUST
CURIODYSSEY
DISNEY WORLDWIDE CONSERVATION FUND
EARTHFRIDENDS WILDLIFE FOUNDATION
EARTH OFFLINE
EAST BAY MUNICIPAL UTILITIES DISTRICT
FILOLI ESTATE
FLAT CREEK FUND

FRESNO CHAFFEE ZOO
GLIDE FOUNDATION
GOOD EARTH NATURAL FOODS
HARLAN ESTATE WINERY
HUellas (ARGENTINA)
JASPER RIDGE BIOLOGICAL PRESERVE
JEWISH COMMUNITY FOUNDATION
LAWRENCE BERKELEY NATIONAL LAB
LAWRENCE FOUNDATION
LAWRENCE HALL OF SCIENCE
MARIN BICYCLE COALITION
MARIN COUNTY OPEN SPACE
MARIN MUNICIPAL WATER DISTRICT
MARINE VENTURES FOUNDATION
MINNESOTA ZOO
MOUNTAIN LION FOUNDATION
NAPA LAND TRUST
NAPA REGIONAL PARK DISTRICT
NATIONAL GEOGRAPHIC SOCIETY
NATIONAL GEOGRAPHIC TELEVISION
NATIONAL PARK SERVICE
NATIONAL WILDLIFE FEDERATION
NORCROSS WILDLIFE FOUNDATION
OAKLAND ZOOLOGICAL SOCIETY
OREGON STATE UNIVERSITY
PACIFIC UNION COLLEGE
PACKARD FOUNDATION
PATAGONIA, INC
PEETS COFFEE AND TEA

PETER MICHAEL WINERY
PG MUSEUM OF NATURAL HISTORY
RANCHO SOLANO GOLF CLUB
SACRAMENTO ZOO
SAN FRANCISCO ART INSTITUTE
SAN FRANCISCO PUBLIC UTILITIES COMMISSION
SAN FRANCISCO ZOO
COUNTY OF SAN MATEO
SANTA CLARA OPEN SPACE AUTHORITY
SCORPIO RISING FUND
SIERRA CLUB
SIX FLAGS DISCOVERY KINGDOM
SOLANO COUNTY PARKS
SOLANO LAND TRUST
SONOMA ECOLOGY CENTER
STANFORD UNIVERSITY
STORER FOUNDATION
STROBEL FOUNDATION
UC BERKELEY
UC DAVIS ROAD ECOLOGY CENTER
UC DAVIS VETERINARY GENETICS LAB
UC SANTA CRUZ
UNIVERSITY OF SOUTH DAKOTA
UNS (UNIVERSIDAD NACIONAL DEL SUR, ARGENTINA)
UTAH STATE UNIVERSITY
WILD AND SCENIC FILM FESTIVAL
WILDCARE

AND HUNDREDS OF INDIVIDUAL SUPPORTERS, VOLUNTEERS AND INTERNS