

IMPACT OF EYE GNATS ...A COMMUNITY PERSPECTIVE

LIFE AT 'GROUND ZERO'

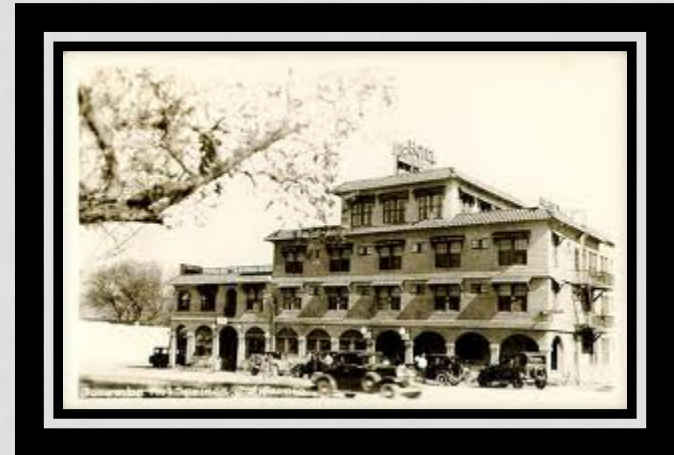
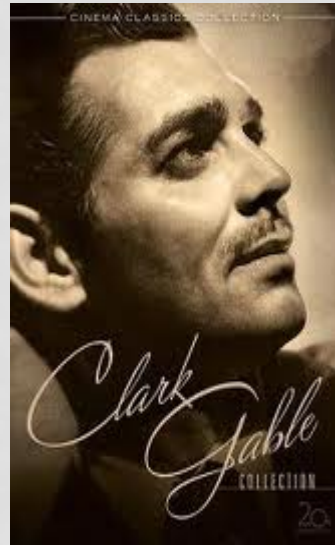
Danielle Cook March 2012

TODAY'S PRESENTATION

- Snapshot Jacumba History
- The people of Jacumba
- Jacumba's Future
- The impact of Eye Gnats on the community
 - Eye Gnats Nuisance Impact Key Issues/Questions
 - Quality of Life Impacts
 - Economic Impact
 - Health Impacts
 - Avoidance Impacts
 - Other Impacts
- Conclusion/Questions

HISTORY

- Pre-European- Kumayaay
- 19th Century Cattle Ranches (by 1907 an “official” town)
- 20th Century vacation destination (by 1925 world-class hotel)
- By 1930 population was 5,000 & Jacumba became prime destination for movie stars



THE PEOPLE OF JACUMBA



- Fireman, teachers, border patrol, mechanics, musicians, librarians, artists, retirees, ranchers, construction workers , entrepreneurs, war veterans etc.
- Median annual Income \$38,490 (compared to \$64,432 in California as a whole)
- 5% residents with completed Bachelor Degrees (compared to 19% in California as a whole)
- 33% travel 60+ miles to get to work (compared to 12% traveling 60+ miles to get to work in California as a whole)

JACUMBA'S FUTURE

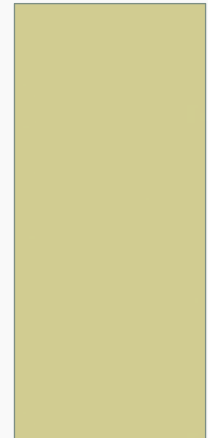


Gateway to Outdoor Adventure and Recreation!



EYE GNAT IMPACT ON JACUMBA!

. . . 2002-2012



EYE GNAT NUISANCE KEY ISSUES/ QUESTIONS



#1 HAVEN'T EYE GNATS ALWAYS BEEN HERE? **YES!**

(BUT normal background levels were low)

- Collar Trap Studies indicated 7 miles from Jacumba, (community of Boulevard) or in close proximity to the farm but in an area considered isolated from farm due to a large hill barrier, eye gnat populations were low (**averaged less than 2 eye gnats trapped per month**)

Source: Final Report *San Diego County Eye Gnat Research and Education Project 2010* Bethke, Vander Mey & Debois

EYE GNAT NUISANCE KEY ISSUES/ QUESTIONS



#2 Why are you complaining, you live in a rural area, you should expect bugs!

YES! We expect to have eye gnats but not at these levels!

8 days after planting Spinach **23,388 gnats produced per acre**
(400 acres would produce 9 million eye gnats in 8 days)

15 days after planting lettuce **17,219 gnats produced per acre**
(400 acres would produce 7 million eye gnats/acre in 15 days)

Note: at these initial levels, even diminishing the population by 99% leaves eye gnats at an intolerable nuisance level!

Source: Emergence trap data -*Jacumba 2008-2009 Eye Gnat Research Project*,
University of Ca. Cooperative Extension San Diego-Bethke and Vander Mey

EYE GNAT NUISANCE KEY ISSUES/ QUESTIONS

#3. a. How do you measure nuisance levels?

- Collar Traps are poor Nuisance measurement tools
- Proving Nuisance levels via pictures is difficult due to eye gnats size and moving target
- Phone calls are poor indicators as not everyone has access to a phone, tourists aren't going to call, and the bar can be raised
- Diminished eye gnat numbers can still create intolerable nuisance levels

b. What Will it Take to Satisfy The Community?



QUALITY OF LIFE IMPACT

EYE GNATS KILL

- Communities by **BREAKING** them up
- **The ability** for residents of all ages and their pets **to enjoy the outdoors**



Hunter



Leia



QUALITY OF LIFE IMPACT

EYE GNATS KILL

- **Children's ABILITY TO LEARN & PLAY AT SCHOOL**

“The eye gnat situation at Jacumba Elementary is horrific”. To combat this situation, the district has installed door fans on each classroom door, removed carpet from the after school room and replaced it with a tile floor so that our students could eat without constantly swatting away or inadvertently swallowing gnats.”

[Steve Van Zant , **Mountain Empire Superintendent** of Schools]

“For the last seven years my students opportunity to learn has been impeded by the always present, always menacing eye gnats. The gnats are flying in their eyes in the classroom. How are they expected to learn? They eat their lunch while their faces become covered in gnats. Have you ever eaten a gnat? They have. I ask myself, do I teach in a third world country?”

[Chelsea Russell, Jacumba School **Teacher** September 2011]

ECONOMIC IMPACT

EYE GNATS KILL



- **OPPORTUNITY FOR RETAILERS**

“...Jacumba had all the makings of another Julian. This could have or even still can be a thriving community. Wouldn't it be nice if we could have enough small businesses to employ the local residents? How can we? When you walked in and out of my shop your face was covered with eye gnats. . . .Who wants to come and stroll through a town with eye gnats in your eyes, up your nose and around your mouth?”

[Former Jacumba store owner 11/4/2011]

- **TOURISM**

.. “There were horrendous gnats everywhere. You were forced to go into the water to get rid of them. . . .”

[Former visitor to Jacumba Spa as seen in TripAdvisor review 8/23/2005]

- **REAL ESTATE VALUES AND SALES**

.. “If you calculate the loss our town has suffered the estimate is \$10,000,000.00 . The County tax collector has lost \$125,000 in revenue due to eye gnat infestation”

[Cheryl Furr, Jacumba/Boulevard realtor who also owns rental property]

HEALTH IMPACT

EYE GNATS KILL OUR SENSE OF “WELL-BEING”

- Eye Gnats are **FILTH FLYS** and also feed on PUS, OPEN WOUNDS and ANIMAL GENITALS



- Eye have been **implicated as mechanical vectors for Conjunctivitis (Pink-Eye)***
- Eye Gnats **facilitate** eye “SORENESS” and INFECTIONS *

***Sources:** Dow and Hines 1957, Greenberg 1973). In California, Hall (1926) correlated pink eye to high populations of *Lioppelates flavipes* (Loew). Also Buehler J.W., J.T. Holloway R.A. Goodman. And R.K. Sikes 1983. *Gnat Sore Eyes-Seasonal Acute Conjunctivitis in a Southern State*. Southern Medical Journal. 76 (5): 587-589

EYE GNAT AVOIDANCE IMPACT (WHAT COUNTY TELLS US TO DO!)



- Mosquito Head Net
- Products containing DEET
- Avon's Skin-So-Soft
- Pesticide Spraying in Our Yards and Gardens!
- Screened enclosures
- Dryer sheets (attached to hats, around sunglasses, etc.)
- Community involvement with trapping



OTHER IMPACTS

EYE GNATS CAUSE INTANGIBLE IMPACTS

- Increased Distrust of County Government
- Stress from living at Ground Zero for over 10 Years
- Siege Mentality



CONCLUSIONS

- EYE GNAT POPULATION EXPLOSION IN JACUMBA MEANS EVEN at 99% POPULATION DIMINISHMENT THEY ARE STILL A MAJOR NUISANCE
- EYE GNATS KILL QUALITY OF LIFE, INCREASE HEALTH CONCERNS AND DESTROY HOME AND RENTAL REAL ESTATE VALUES
- JACUMBA'S FUTURE DEPENDS ON TOURISM
- EYE GNATS HARM TOURISM*
- COUNTY GOVERNMENT IS SUPPOSED TO PROTECT ALL CITIZENS FROM PUBLIC NUISANCES THAT CAUSE QUALITY OF LIFE AND ECONOMIC INJURY
- RETURNING EYE GNATS TO VECTOR STATUS IN COUNTY CODE WILL GIVE THE COUNTY NECESSARY FUNDS FOR CONTINUED RESEARCH AND THE TOOLS TO PROTECT THE PUBLIC

* **Source:** County of San Diego Department of Agriculture Weights & Measures
Pest Notes –Aug 2004

THANK-YOU



QUESTIONS?

OUTSIDERS VIEW OF EYE GNAT SITUATION

- “. . .Yes it's a pain to deal with, but **you deal with it or just move**. You chose to live in Jacumba--if there's only 561 people living there, it's for a reason. I have no sympathy for a group of complainers wanting to close down farms because of gnats”
- “**This protest is outrageous, who are these people** that are protesters? are they related to real estate developers, or other interests?”
- "Eye gnats do not bite or spread disease". So they are not a vector for anything. **They just bother some rich people”**
- “**It's the way ‘you people’ live”**



Source: First three actual quotes from discussion pages of various news articles and fifth from County official