Roll Call: City Council: Council Member West, Council Member Hamilton, Council Member Stadtherr
Absent: Mayor Pro Tem Irish, Mayor Martinez

Due to the absence of the Mayor and Mayor Pro Tem, the meeting was conducted by Council Member West.

Pledge of Allegiance Led by Council Member Hamilton

ORAL COMMUNICATIONS
None

SCHEDULED MATTER

1. Presentation Regarding Biological Control of Mosquitoes by Bats

Council Member Stadtherr stated that there would be a presentation by Jacqui Ainsworth, bat biologist, regarding the possibilities, advantages and disadvantages of using bats as a natural form of insect control. Council Member Stadtherr stated that Ms. Ainsworth would present a half hour video and then give an especially prepared presentation entitled Bats and Porterville.

Jacqui Ainsworth presented the 30 minute video by Merlin Tuttle, Executive Director of Bat Conservation International. The video explained that bats were America’s most beneficial, but endangered animals, with the most frequent cause of decline being the loss of natural roosts. It further explained that by putting up bat houses, America’s bats could be restored while also reducing insect pests. The video reviewed the construction, selection, and placement of bat houses. The video talked about the benefits of restoring natural habitats and the effects of increasing the bat population for controlling insects as opposed to chemical insecticides. It was stated that most American bats liked to live in crevices just 3/4" wide, the space that best protected them from predators, and most bat houses includes numerous crevices. Most houses were made of plywood, but they could be constructed from almost anything, even plastic, and the placement of the bat boxes, in higher locations, was extremely important. The video discussed difference types of bat houses, including size and color, the best locations, and actual construction methods for building your own bat house. Nationwide, colonies of bats were shown, and the Congress Avenue Bridge in Austin, Texas, was shown with it’s 1.5 million Mexican Freetailed Bats that live beneath the bridge and come out to eat 30,000 pounds of
insects each night, while tens of thousands of tourists come every summer to see the bats
bringing in $8 million in tourist dollars. Anyone interested in joining Bat Conservation
International, or participating in the North America Bat House Research Project, should call 512-
327-9721.

Council Member Stadtherr stated that the tape talked mostly about Texas, Louisiana and
Alabama, but Jacqui would talk about bats locally, as we have different issues. He stated that
Mrs. Ainsworth had also brought a series of articles and he had made copies which were
available for the audience.

Jacqui Ainsworth stated that she was from Porterville and went to Porterville High
School and Porterville College, and then to Humboldt State University, where she got into
marine biology and then started working with bats. Ms. Ainsworth discussed her love of bats
and how friendly and cute they were. Ms. Ainsworth stated that she lives in Austin and has done
volunteer work for Bat Conservation International, of which she is a member, and has worked on
the North America Bat House Research Project. She then gave a presentation entitled Bats and
Porterville.

Bat Facts
• 1,100 species of bats (more than any other animal group)
• 1/4 of all mammals are bats
• most bats are beneficial (all are beneficial in North America)
• key species in most ecosystems
• only major predators of night flying insects

Bat Myths
• bats are not blind, they see very well
  • mega-bats, fruit bats, do not use echo location, they see in color very well
  • micro-bats, insect eating, use echo location at night, but see very well
• bats do not become entangled in human hair
• bats rarely transmit diseases, and are very clean
• bats rarely bite
• bats are not rodents, more closely related to primates
• Merlin Tuttle quote “More likely to be struck on the head by falling meteorite than to
  get rabies from a bat.”
  • Only animals that do not become aggressive when they get rabies. They become
    paralyzed and fall to the ground.

Bats and Mosquitos
• one little brown bat can catch 1,200 mosquito-sized insects in one hour
• bats do not transmit West Nile Virus
  • they are a dead-end host, will not catch or spread it
• over time pesticides will kill far more predators of mosquitos than the actual mosquito
  itself.
Bats and Agriculture
• all American bats are beneficial
• colonies of big brown bats can protect farmers from 33 million root worms or more a year
• echolocation calls alone will help because it will deter moths

Local Bat Species
• Little Brown Bat (Yuma Myotis)
  • most common in this area
  • will provide most benefit for mosquito reduction
  • Also eat a variety of insects--moths, rockhoppers, leafhoppers, June beetles, midges, flies, etc.
  • frequent users of bat houses

• Mexican Freetailed Bat (Tadarida brasiliensis)
  • the colony under the bridge in Austin of two million
  • colony of 1½ million in Round Rock
  • colony of 4 million in a cave
  • frequent users of bat houses
  • eats mostly moths
    • corn ear moth
    • cotton boll worm moths

There was a question about what Austin did about the bat guano, and Mrs. Ainsworth stated that she was not sure, as it was over the river and it was not an issue. She stated that there was an aroma from the bridge, and she was sure that they used it for fertilization. Mrs. Ainsworth stated that in building bat houses, they would hold only 200 to 300 bats.

• Big Brown Bat (Eptesicus fuscus)
  • big agricultural boost--rank among Americas most beneficial animals
  • eat ground beetles, scarab beetles, cucumber beetles, snout beetles, stink bugs, moths and leafhoppers
  • good fit for any bar house

• Pallid Bat (Antrozous pallidus)
  • eat scorpions (to whose sting they are immune), crickets, beetles, and grasshoppers
  • unique habit of feeding almost entirely from the ground

How will Bats benefit Porterville?
• bats consume large amounts of mosquitos
• eat large amounts of various agricultural pests
• bats reduce the need for chemical pesticides

Chemical Pesticides
• can endanger human health
• there is a need but reducing is a good thing
• residues in ground water can cause respiratory issues in children and immune system problems
• can harm non-targeted animals

Bats and West Nile Virus
• bats cannot do it alone, it is one step toward a better plan
• community education
  • not to be afraid of the bats
  • regarding stagnant water
• can reduce need for pesticides
• increase bat population for long-term benefit
• using housing encourages population growth

Bats at Risk
• more than 50% of species on the decline or endangered
• extremely vulnerable--lowest reproducing mammals for their size
  • female bats have one baby a year
  • the baby is 1/3 the weight of the mother
• roost in huge colonies, and a severe act of vandalism can destroy thousands
• humans are bats biggest problem
  • community education is important

Mrs. Ainsworth stated that for further information, people should contact Bat Conservator International, www.batcon.org, and she recommended getting both the Bat House Research Project, and if anyone wished to contact her with any questions, she could be reached at jainsworth@familycuddles.com.

Council Member Stadtherr stated that people should be sure and sign the sign-in list, and if people wanted to be keep up to date, they should include their contact information to the side.

Council Member Hamilton asked what the eating radius was for the bats, and was told that the bats would go as far as what they needed to eat.

Mrs. Ainsworth stated that there was lots of food in the area, but a lack of habitats. But by providing the bat houses, they have the food and a roosting area, making for happy bats. Jacqui answered questions about moths. She stated that the bats would go out to feed every night from April to September, October.
Allen Ishida, County Supervisors Elect, District 1, stated that he sprayed once a year for thrift, and he wondered how susceptible the bats were to the pesticides.

Mrs. Ainsworth stated that normally the bats were recommended in addition to normal pesticide use, and eventually they would reduce the need for the pesticide. She stated that she could try and find out about spray around the bat houses, but possibly it was a question of timing. She was asked how much guano would collect under a small bat house, and she stated that it would be a small amount that would probably be taken care of by normal erosion outside.

Council Member Stadtherr stated that the articles: Bats, Man-Made Roosts, and Mosquito Control, Merlin D. Tuttle; Optimal parameters to attract bats in the Central Valley, Rachael Freeman Long¹, W. Mark Kiser², and Selena B. Kiser³; and, Attracting Bats, Bat Conservation International 2004, were available in the back of the room. He stated that people would need to provide bat houses that accommodated the climate in this area.

There was a discussion about the bat housing proposed ten years ago which did not occur. Council Member Hamilton stated that Council Member Stadtherr was talking to the Army Corps of Engineers now.

Council Member Stadtherr stated that they were trying to do the same thing now, and they hoped it would meet a better end. He stated that there was an article in the Recorder that stated that the Corps was building bat houses at the Kaweah Dam, and hoped to do it at Success Dam but couldn’t do it because of budget cuts, and the materials were $705. It turned out that the problem was that the engineer in charge of the project was transferred to another location, and there was no one left to do it, and not that the Corps needed the $705. Someone offered to pay the $705, and the Corps sent them to City Hall. City Hall called the School District, who called Council Member Stadtherr and stated that it seemed to be something right up his alley. He stated that they put together a little group–Edison is going to donate about a dozen utility poles and put them in the ground near Bartlett Park, Porterville Shop Class will build the houses, and the Corp of Engineers will mount the houses up there and oversee them. Council Member Stadtherr stated that they hoped to have the houses up in March in time to catch the bats when they come out.

Someone stated that they thought they were supposed to go out to the airport and put the bat houses together.

Council Member Stadtherr stated that a dozen houses for the Corps was about their limit, as the schools stated that it was a learning experience and would only do so the twelve. He stated that he called Steve Tree, Director of the Porterville Sheltered Workshop (who just left), and asked if they could do something like that, and Steve stated that they had the facilities, but not the manpower, and if the City requested them, and got volunteers, they could use their facility. He stated that it took ½ a sheet of plywood to build one house, and it comes out to about $30 per bat house with all the supplies.
Someone stated that they had ordered a catalog online and gotten a dozen different diagrams, and if anyone wished to xerox them, they would run off copies.

Council Member Stadtherr stated that they should put an asterisk next to their name on the sign-in sheet, with a telephone number.

Council Member Stadtherr stated that Sheltered Workshop volunteered to do this if the City so requested. He stated that the City had made no request, and it would take a full Council to make any request, and this was an information meeting only, and they did not have a full Council. He stated that Jacqui was there for the holidays, and he wanted to take advantage of her presence while they could.

Jacqui Ainsworth stated that she would be happy to stay in contact as liaison to Bat BCI. She stated that people could also order bat houses from Bat Conservation International for about $80 for a completed one.

Someone stated that Senator Flores was very interested in the mosquito issue. He has contacted Governor Swartzenegger for more mosquito abatement funds for Fresno, but he had not heard back yet.

Council Member Stadtherr thanked everyone for coming.

**ADJOURNMENT**

The Council adjourned at 7:08 p.m. to December 21, 2004.

Georgia Hawley, Chief Deputy City Clerk

SEAL

Kelly West, Council Member