

There was a National Cotton Council DVD playing prior to the meeting starting. Dennis Palmer instructed everyone to take a translator headphone and called the meeting to order. The meeting started at 8:20 a.m.

Dennis began the meeting with a moment of silence in memory of Travis Perkins, Jr. Dennis explained that he was one of the SIT pilots and had passed away in a fatal plane crash earlier in the year. Dennis thanked everyone for their attendance. Dennis asked for introductions.

Don Parker, NCC, TN;  
Joe Ellington, NM State University, NM,  
Jim Ed Miller, Producer, TX;  
Bobby Sloan, Producer, NM;  
Keith Deputy, Producer, TX;  
Joe Friesen, SCNMPBW, NM;  
James Schoenholz, USDA APHIS PPQ, NC;  
Larry Antilla, ACRPC, AZ;  
Jim Rudig, CDFA, CA;  
Bill Norman, NCC, TN;  
Craig Brown, NCC, TN;  
Mike Whitlow, ACRPC, AZ;  
Michelle Walters, USDA CPHST, AZ;  
Jesus Escarga Tarin, Chihuahua, Mexico;  
Rene Yescas Domínguez, Sonora, Mexico;  
Juan Carlos Ramírez, Chihuahua, Mexico;  
Héctor Sánchez, Mexico;  
Rene Yescas Domínguez, Sonora, Mexico;  
Leobardo Aguilar, Durango, Mexico;  
Mario Zaragoza, Coahuila, Mexico;  
Larry Smith, TXBWEF, TX;  
Edward Herrera, TXBWEF, TX;  
Nathan Moses, USDA APHIS CPHST, AZ;  
Jerry Levitt, USDA APHIS, AZ;  
Ernie Miller, USDA PBWRF, AZ;  
Charles Allen, Texas AgriLife Extension, TX;  
Eduardo Gutiérrez, USDA APHIS IS BW, Mexicali, Baja California;  
Ruben Tapia, USDA APHIS IS US, General Consulate Juarez, MX;  
Richard Zink, USDA APHIS CPHST, CO;  
Earl Andress, USDA PBWRF, AZ;  
Mike Bruderman, NCC, AZ & CA;  
Leighton Liesner, ACRPC, AZ;  
Ty Whitten, Monsanto, MO;  
Ted Boratynski, USDA APHIS PPQ, El Centro, CA;  
Héctor Aguirre Romero, Baja California, Mexico;

Lindy Patton, TXBWEF, TX;  
Larry Turnbough, Producer, TX;  
Greg Wuertz, Producer, AZ;  
Bob Hull, Producer, CA;  
Clyde Sharp, Producer, AZ;  
Bob Staten, PBW, AZ;  
Tish Tamulis, ACRPC, AZ;  
Dennis Palmer, Producer, AZ

[\* there were a few names that I could not make out on the recording]

Dennis yielded the floor to Don Parker, who did roll call. Minutes were sent out to everyone prior to this meeting. Don reminded everyone to leave him with contact information. AC roll call is as follows:

Here – Dennis Palmer	Absent - Rickey Bearden (advisor)
Absent - John Benson	Absent - Craig Bergman
Here – Bobby Hull	Absent - Rick Lavis (advisor)
Here – Jim Ed Miller	Absent - Don Parrish (advisor)
Here – Clyde Sharp	Absent - Wallace Shropshire (advisor)
Here -Robert (Bobby) Sloan	Here – Larry Turnbough
Absent - Earl Williams (advisor)	Here – Greg Wuertz

Don advised that there is a quorum. Dennis asked if any member of the Action Committee would like to make any changes on the 2009 NCC PBW AC minutes. There were no changes suggested.

**M/S/P** **Bobby Hull moved to approve the 2009 NCC PBW Action Committee minutes as presented. Clyde Sharp seconded the motion and the motion passed unopposed.**

Bill Grefenstette retired last year. This Committee urged APHIS to maintain a national coordinator position and expand the role to include the boll weevil and pink bollworm programs. On September 15<sup>th</sup> of this year, Jim Schoenholz was officially named to replace Bill Grefenstette's position. Jim worked with the boll weevil program in 1983 in North Carolina, and involved in the Georgia eradication efforts and expansion into Tennessee and Alabama. He served as the State Plant Health Director in Arizona from 1994 to 2000. Before accepting this position, he served as the Senior Regional Program Manager for AQI Programs, and later as a National Quality Assurance Coordinator in Raleigh, NC. Chairman Palmer welcomed Jim and asked him give a report.

Jim thanked Dennis and proceeded to give a power point presentation. Jim explained that Aaron Miller was going to do the regulatory portion of the presentation, but due to back problems, was unable to make the meeting.

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Arkansas**

- Trapping: 0 trap captures
- 38 cotton warehouses under compliance
- Equipment inspections: 2 out of compliance or w/o required documentation for movement out of the regulated area.

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Arizona**

- 975 Certificates (PPQ 540) Issued for movement
- Fumigations
  - 6,765 tons of cotton seed (57 fumigations)
  - Harvesting equipment (1 fumigation)
- 1 Equipment Inspection
- 4 Compliance Agreements
  - 4 Baled Cotton

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Louisiana**

- Trapping: 0 trap captures
- Equipment inspections: 0 out of compliance or w/o required documentation for movement out of the regulated area.
- 11 cotton warehouses under compliance

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**New Mexico**

- 7 Certificates (PPQ 540's)
  - 2 for fumigated research cotton
  - 5 Equipment movement
- Compliance Agreements:
  - 5 cotton gins
  - 1 warehouses

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Oklahoma**

- Compliance reviews conducted:
  - 4 cotton gins – biweekly visits
  - 2 cotton warehouses – monthly visits
  - 1 cotton oil mill – weekly visits
- Regulatory visits made to 5 gins not under compliance agreements

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Texas**

- 353 certificates for movement issued:
  - for equipment
  - for okra
  - for cotton seed
- 126 fumigations conducted
  - for cotton seed
  - for equipment
- 8 Compliance Agreements

Trapping is a big activity in Arkansas. He went over the figures noted in the slides and there were no questions. The PBW 2010 Funding power point was then presented.

United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine

**Pink Bollworm Eradication  
Federal Funding Summary  
2010**

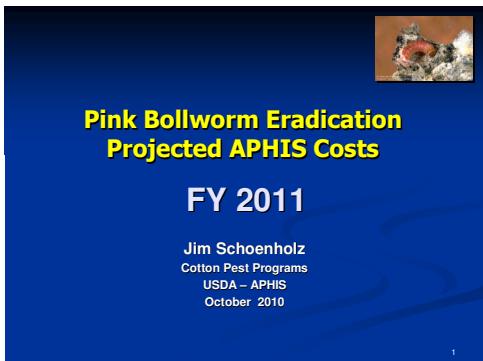


**Presented by:**  
Aaron Miller,  
Regional Program Manager  
USDA, APHIS, PPQ  
Abilene, TX 79602

<b>FY10 Pink Bollworm Expenses</b>		
National Assessment		\$1,393,742
Eastern Region Assessment		\$ 252,165
Western Region Assessment		\$ 273,671
Rearing Facility Costs:	Salary Benefits	\$2,034,300
	Non Salary	\$2,401,700
	Shipping Costs	\$ 269,750
Total Rearing Facility Costs:		\$4,775,750
Aerial Releases:		
Arizona		\$ 882,500
California		\$ 630,000
Texas (NM)		\$ 167,000
Total Aerial Releases:		\$1,379,800
Agreements:		
Texas (Emergency funding + debt retirement)		\$ 537,671
New Mexico (Carryover FY 09 funds)		\$ 55,000
Total Agreements:		\$ 592,671
Grand Total – PBW National Allocation		\$8,667,307

**NCC PINK BOLLWORM ACTION COMMITTEE MEETING**  
**October 26<sup>th</sup>, 2010**      **Fiesta Inn, Tempe, AZ**

This is a summary of expenditures for 2010. Of course the final figures are not in yet because the season is not done. The Western Region Assessment was \$273,179. The total Rearing Facility Costs were \$4,775,750; total Aerial Release \$1,379,800; and the NM and TX Agreements \$592,671. This brings the total Pink Bollworm National Allocation to \$8,667,307. Jim the proceeded to go over the FY2011 Pink Bollworm Eradication Projected APHIS Costs slide.



APHIS Direct Costs – 2011 Projected (\$ millions)	
Sterile Moth Release (CA-330; AZ-883; TX-167)	1.387
Rearing Facility — Salaries & Wages	2.011
Rearing Facility — Operation	2.175
Shipping Sterile Moths	0.265
<b>Total Rearing &amp; Release Costs</b>	<b>5.838</b>
<b>Projected Balance Available</b>	<b>.144</b>

APHIS Indirect Costs – 2011 Projected (\$ Millions)	
NCC's FY 11 Pink Bollworm Request	\$7.861 M
USDA - APHIS Indirect Costs	1.037
Plant Protection and Quarantine	.126
Regional Indirect Costs	.512
Headquarters	.203
<b>Amount for Cost-Share (Sterile moth rearing &amp; release)</b>	<b>5 .982</b>

Jim reported that currently we are operating under a continuing resolution and that this is what was requested, and his is what the direct cost of the delivery of the program is slated to be as far as the cost of the release. Dennis thanked Jim for his report. Dennis yielded the floor to Craig Brown, who is a member of the TAC. .

Craig stated that Jim mentioned the situation that we face as far as the appropriations funding. As a reminder, the PBW is included in the joint pest account (with BW). The request we made to Congress was a combined joint 22.11 million dollars for this fiscal year. They are anticipating 14.33 million dollars for BW and 7.86 million dollars for PBW. Jim had already shown the field break down.

Craig reported that when Congress adjourned, they failed to pass an appropriation bill. The Senate did get to a full Committee mark up. The Senate is in agreement with the 22.11 million dollars. We are not as confident in the House. Congress will now go into a

lame duck session following the election. There will be two lame duck sessions following the election. They will have to do something regarding the Appropriations and the Budget. Right now there is a continuing resolution through December 3<sup>rd</sup>. Something has to happen. We expect that they will propose an omnibus funding bill (lumps all of the appropriations bills into one big appropriation bill). That's where we think the appropriations request for the joint pest account will end up. It will be particularly challenging due to the lame duck Congress. Depending on what happens in the November elections, we do not know who will be making the decisions on the funding. Additionally, there will be tremendous pressure on the next Congress to controlling federal spending. We have our challenge worked out for us.

We have been working on a strategy to make contacts with the few members, particularly on the House side, with the Ag Appropriations Sub Committee who are now working on the omnibus bill, which will affect the joint pest account. We are targeting several key members including Mr. Pastor from Arizona, a couple members in south and east Texas, and a member in CA. We will be concentrating on contact with those members to make sure they understand the critical nature of this years funding and have an understanding of where we are in this program. We are working on costs to finish and complete this program. We are at a very critical stage in both programs. That is going to have to be the message that any reduction in funding jeopardizes the investments that the growers have made so far, and exacerbates the time line on completing this program. Some of these members are in pretty difficult races, particularly Mr. Edwards in Texas, but we will do our best to get their attention.

That's where we stand. If you were to guess where we would end up, the best case scenario is that we will get our request. We have stayed on our time line for completion, and have reduced appropriations. We will be working in the near future on post-eradication funding. Obviously, you cannot get to post-eradication until you get to eradication. Both committees have done good work on understanding where we are in that post-eradication time mode of action. We have got to finish the active eradication for both programs. It is critical that we do that. We have our work cut out for us with the lame duck session. We will have our work cut out for us in the future Congress to protect our investment. Particularly, we have to make sure we have excellent plans in place for post eradication on PBW and BW, so that we can justify some funding from that aspect as well.

Our best request is our request of \$22.11 million. Hopefully, we won't have to take a reduction in that. That's what we are shooting for. The process until then while the continuing resolution is in effect is that the USDA will prorate out on the FY10 request, but it will be adjusted to whatever the final numbers are. This has been a common practice and is a precedent in the past.

Upon inquiry, Craig answered that we do not know how the split will be between the two programs. The easy answer is pro rata. It may depend on whether or not it is a minor or

major cut. In that case, you would then have to evaluate where both programs are at and what has to happen to keep the programs going. Let's hope we don't have to do that.

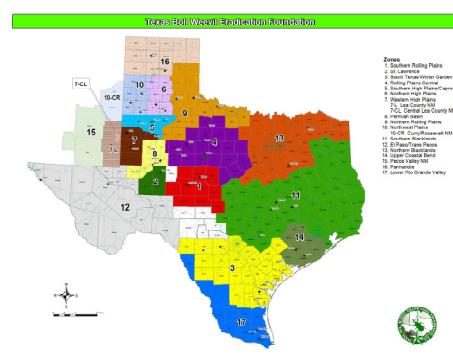
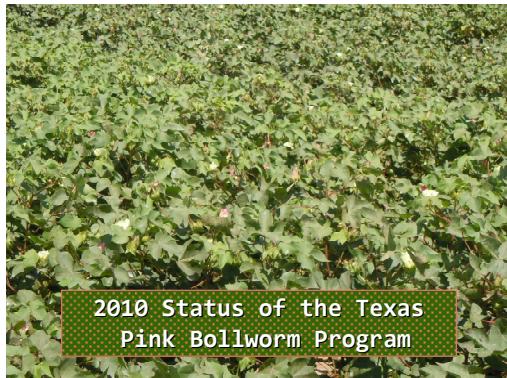
Larry Turnbough advised that we saw what was projected for 2010, now that we are at the end of the year. He asked if there will be any extra money. Craig was not sure, and deferred to Jim Schoenholz. Jim advised that they will not balance the books until the activities are completed. Craig advised that we will not be giving any money back, but it was a good idea to wait until the books were balanced. There was some carry over funds from last year that actually came in pretty handy with this program. There were no other questions.

Dennis thanked Greg and called Ted up front. We will now hear the program accomplishments from the different areas.

We will first hear from Larry Smith, Trans Pecos / El Paso area, then Joe Friesen from the New Mexico area, and requested that Ted introduce the Mexican Program.

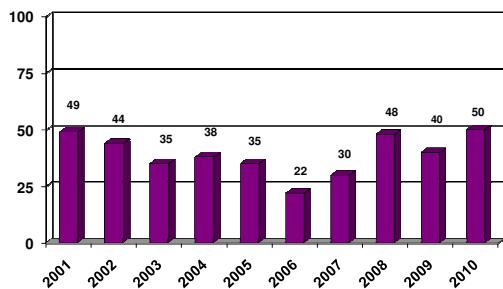
Ted introduced Ing. Hector Sanchez with the program in Mexico will discuss last years planning as well as the budget for the coming year. Ing. Héctor Aguirre Romero will discuss Baja California. Ing. Rene Yescas Domínguez will discuss Sonora. Ing. Jesus Escarcega Tarin will discuss Chihuahua. Ing. Leobardo Aguilar will cover Durango. Mario Zaragoza will talk about Coahuila.

Dennis advised that Larry Antilla will report on Arizona, and then Jim Rudig will report on California. Dennis requested Larry Smith to give his presentation.

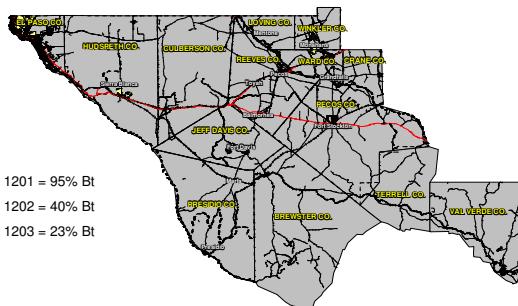


Larry thanked Dennis for the opportunity of speaking this morning. Larry reported that it is quite a change from this time last year when we had encountered a problem. We came through our problem last year very well, and am pleased to be able to report that today. Larry showed a map of TX and showed the zones, focusing on the El Paso / Trans Pecos area. That zone makes up about 38,000 acres.

### Percent of Cotton Acres Planted to Bt Varieties



### El Paso/Trans Pecos



Of the acres that we have had this year, about 50% have been Bt cotton. It is separated into three different regions. The Trans Pecos region, around the Pecos area around 9-10,000 acres. The other two areas are right along the river by El Paso. He showed that area that is normally about 95% Bt cotton. Last year we had some pinkies in that area, and did not catch any this year. He then referenced Pueblo II which is about 40% Bt. Down close to Fabens where they had the outbreak last year is about 23% Bt. In the area referenced, they have about 460 acres of organic cotton (5 acres around Pecos, about 360 acres in the Van Horn area, and 130 acres around the El Paso area).

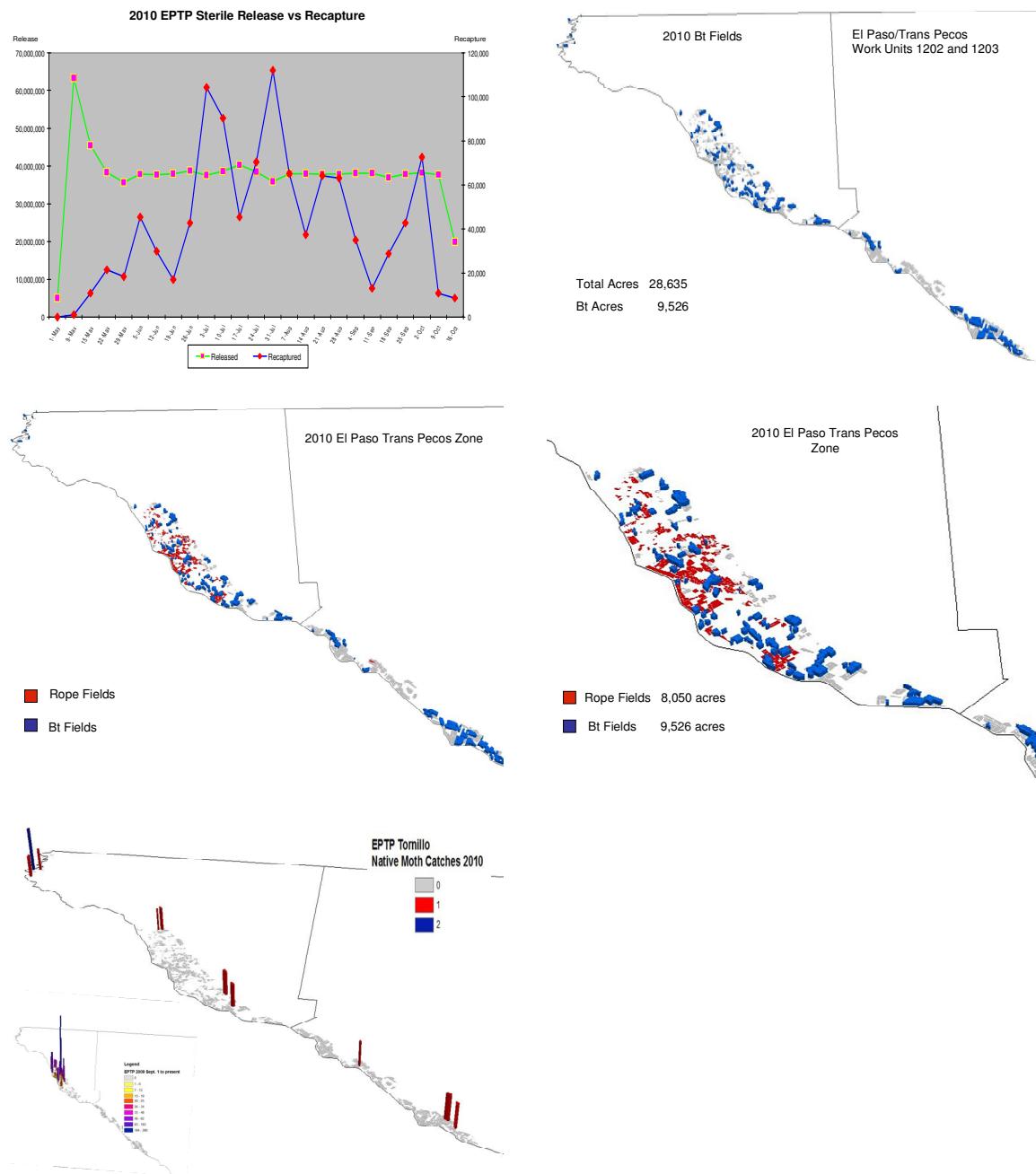
### EPTP - Bt and Non-Bt Acres

Year	Unit 1201		Unit 1202		Unit 1203		Total Acres		Total Acres Planted
	Bt	Non-Bt	Bt	Non-Bt	Bt	Non-Bt	Bt	Non-Bt	
2004	10,574.9	4,227.5	3,611.6	9,355.2	1,604.7	12,375.3	15,791.20	25,958.00	41,749.20
2005	8,899.5	2,622.7	3,980.4	10,486.4	1,516.3	14,047.0	14,396.20	27,156.10	41,552.30
2006	6,166.9	6,279.1	2,569.1	12,397.9	701.1	14,307.5	9,437.10	32,984.50	42,421.60
2007	7,053.3	5,172.4	3,353.1	10,601.2	1,553.4	12,796.1	11,959.80	28,569.70	40,529.50
2008	9,479.3	322.4	4,096.2	9,366.0	2,834.6	8,361.5	16,410.10	18,049.90	34,460.00
2009	6,023.7	392.0	4,587.6	10,198.8	2,914.5	9,860.6	13,525.80	20,451.00	33,976.80
2010	9,813.4	366.9	6,640.3	9,926.2	2,886.5	9,182.1	19,340.2	19,475.2	38,815.40

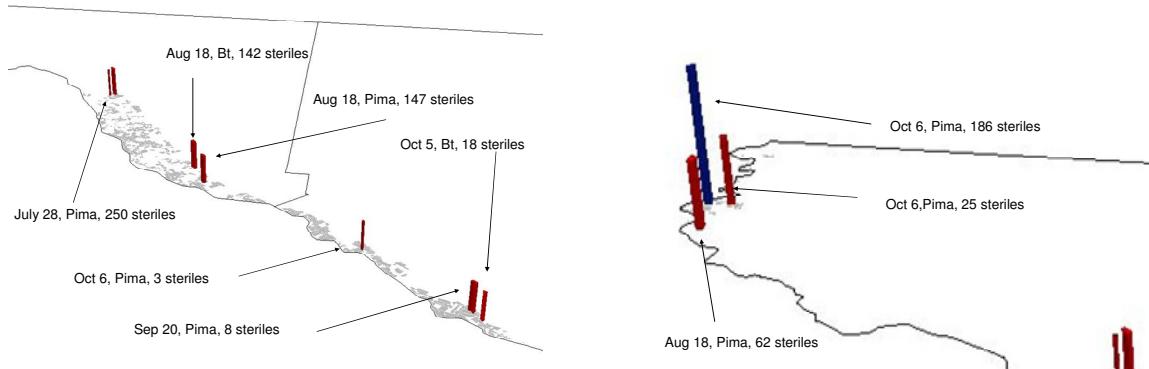
This just breaks out the work units and shows how they have 38,000 acres of non-Bt planted in that zone. Larry referenced the recapture rate for the entire zone for the entire year. We had a lot of moths in TX right off the bat, so we had a large number of releases

early on. Looking at our recapture rate, it took us to build back up. We had several dips in the recaptures. The blue bar is the recaptures. You are looking at two different number representatives. You can see how we were releasing at a pretty set rate, but having a lot of variation in our recapture rates.

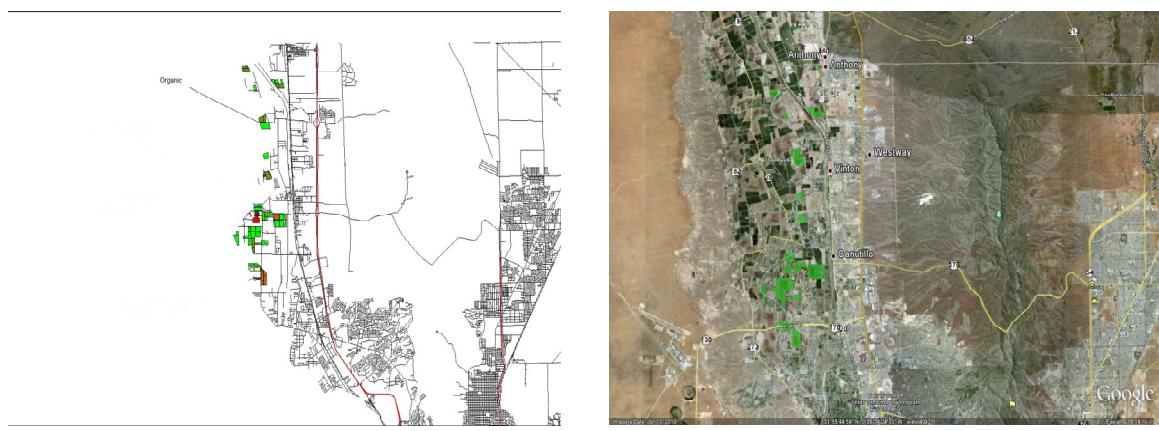
In the Pecos area where we have more of a lab experiment, we are looking at how long we can continue to capture the pinkies during the hotter times of the year.



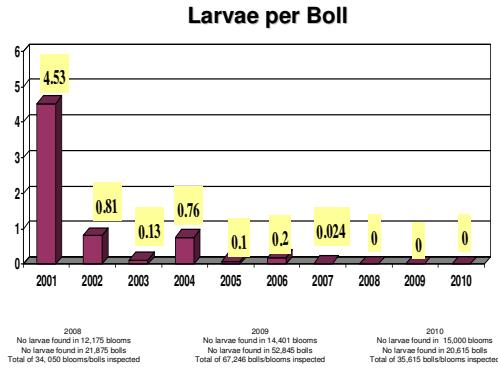
This looks at the fields of Bt we Roped. This is the area of the outbreak last year and the area that we roped coming into the Spring. There was approximately 8,000 acres roped in that area along with the Bt fields. This is our native captures not including the two we caught yesterday. The red bars are one catch; the blue bar signifies two captures. The little inset area is the outbreak area last year, and is fairly clean. We came through that very well. You can see why we questioned while capturing pinkies that these were dye depleted. There was no real significance, especially when you start looking at dates.



This is just giving the dates of how many steriles were caught along (with the one questionable native). This is in the lower valley (the outbreak area of last year). In the upper valley, we had two from the early part of October. We also had an August 18<sup>th</sup> and had two captures yesterday afternoon, one in the same field as the August capture. This is looking at that area two dimensionally, and you can see the organic field. Red fields are where we caught all during the season. The next slide is a Google map showing the organic. Larry pointed out where the red fields correspond. He showed where you can follow the TX line and commented that there is a lot of proximity between NM and TX.



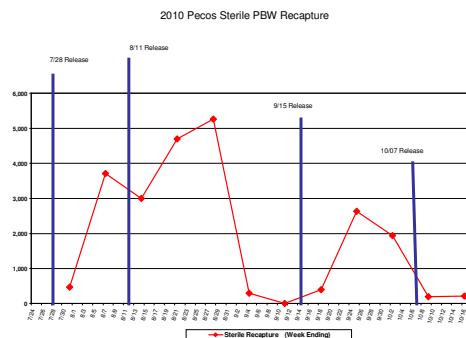
Larry discussed some of the difficulty they have encountered in identifying some of the sterile moths. When you get this kind of color on the tip it takes a lot of work and effort to identify these moths. It is difficult when you get down to that little of color.



Larry reported that for the last three years they have not caught any larvae in El Paso / Trans Pecos. There were over 35,000 inspections this year in cutting bolls and looking at blooms. We have cut extensively in that organic area and have not found anything yet.



On our sterile recaptures, you can see the area. We had pretty good representation up and down the valley. In the Pecos area, looking at recapture rates in that area, we only had four drops during the summer. The slide reflects the dates that we released those on.



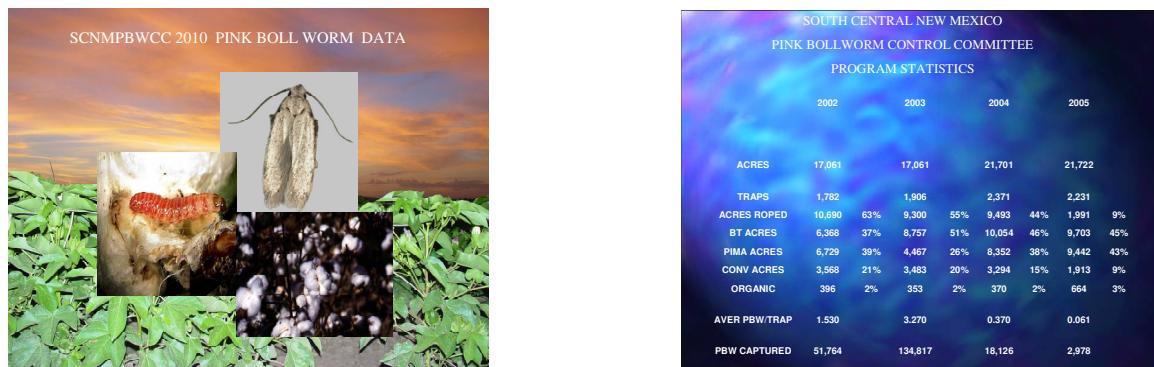
Larry commented that this was the picture he showed at the boll weevil meeting last month. They are cotton stalks that have been baled. A Chinese company has contracted with a United States company to use cotton stalks for energy production. One of our observant trappers saw this and started questioning why you would bale cotton stalks. These bales were going to be hauled to Iowa. This would impact boll weevil and pink bollworm if we were not aware of it. It could have fallen through the cracks very easily.

Lindy Patton inquired whether or not the FSA data has changed this year. In the past we received Bt or non-Bt and assessed based on that. We didn't get that this year. Larry advised that it has not impacted us in Arizona. Larry explained that his dealings with FSA are usually late. During an active eradication program, his statute requires that non-Bt cotton growers register those acres, map them and provide them to our Council, so we can assess them. There are very heavy penalties if they don't. Regarding the central and eastern part of the state, where growers are no longer statutorily obligated to report, we request voluntary registration. It also requires some pushing from our supervisors.

Jim Rudig explained that in California, their assessments are based on a per bale production, regardless of cotton type. We do identify the pink bollworm eradication program Bt cotton in southern California, although he does not do that for the San Joaquin Valley. Joe Friesen advised that he does not use FSA. Keith Deputy advised that they do certify the Bt as a grower, but not the Pima.

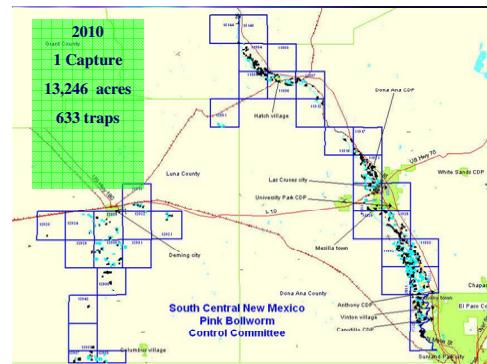
Jim Levitt reported that in one of the farm bills, there was a privacy issue. In Arizona, we have an MOU with FSA regarding data sharing information. Jim felt that was key in allowing them to get information from FSA. Lindy Patton advised that he has that also.

Dennis advised that Clyde Sharp has headed our Oversight Committee for three years. Approximately every three weeks throughout the summer and fall, they have a teleconference. It has been invaluable to the program. Dennis thanked Clyde. It has really tied the program together. If anyone would like to be a part of that teleconference, please let Don Parker know. Don sends the e-mails out on when they take place.

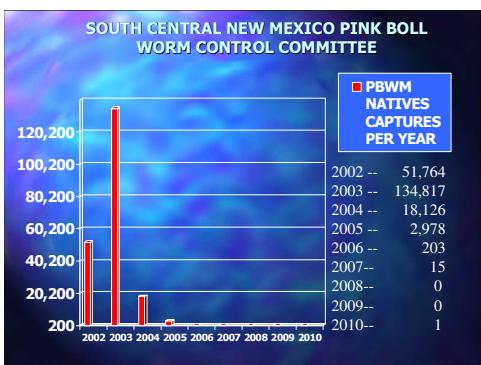


Joe introduced himself. He is the Program Director for South Central New Mexico Program. They have had a really good year. This first slide is historical. If you look at 2003 (first year of the program), they were catching over 134,000 native pink bollworms. In 2008, 2009 and 2010 we were down to 0. We just had to change this last week because we had a capture. Overall things are going very well. We had 690 acres of organic this year; 10,000 Bt acres; and Pima and Conventional just over 3,000 acres.

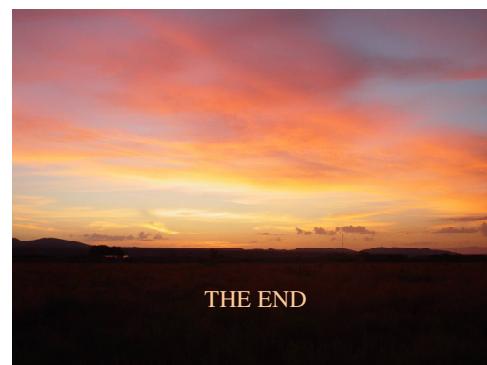
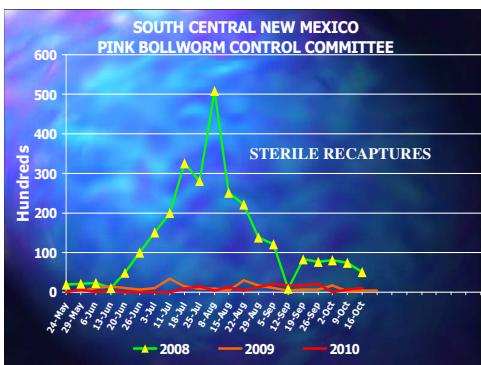
SOUTH CENTRAL NEW MEXICO PINK BOLLWORM CONTROL COMMITTEE					
PROGRAM STATISTICS					
	2006	2007	2008	2009	2010
ACRES	21,627	16,957	14,664	9,710	13,246
TRAPS	1,652	910	412	510	633
ACRES ROPED	627	3%	1,325	0	0
BT ACRES	7,902	36%	12,603	11,361	6,757
PIMA ACRES	11,748	55%	3,580	2,383	2,513
CONV ACRES	1,974	9%	774	920	440
ORGANIC	606		733	753	532
AVER PBW/TRAP	0.0066	0.0006	0.0	0.0	0.0
PBW CAPTURED	203		15	0	1



This is a three county program geographically. At the top is Sierra county. Joe also pointed out El Paso TX. Joe showed the area where they found the one native last week. In 2010, they had one capture, 13,246 acres with 633 traps. Below the line is international boundary and goes into Chihuahua, Mexico.



In 2007 was the last time we caught anything significant (15 captures). As far as larvae, we started off pretty heavy, then in 2004 we had two. From 2005 on, we had no larvae.



This slide shows the sterile recapture rates from 2008, 2009 and 2010. There were no questions. Dennis thanked Joe for his presentation. Dennis requested each individual report how much organic cotton is grown in their particular area.

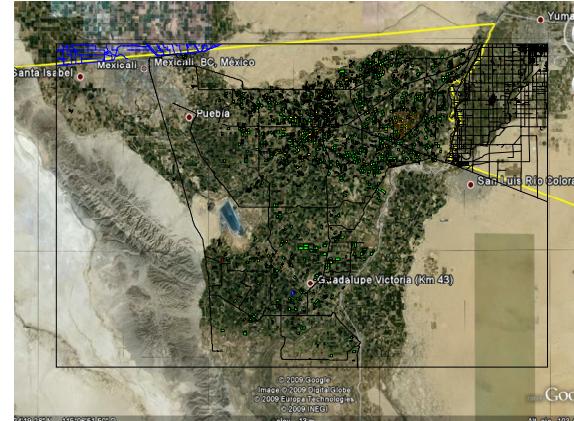
Dennis thanked Joe for his presentation and advised that Hector Sanchez, Sanidad Vegetal, is next to speak. Ing. Sanchez thanked everyone. He reported that what has been going on with the United States and Mexico has been going on for a while. There was interest in establishing this program in eradication.

Particularly in 2002, they really paid attention to the needs of the growers. We started this very successful program. We would not have been able to do it on our own. We had some vehicles donated to us. Fortunately, we have the valuable assessment of Dr. Staten.

With Dr. Staten's assistance, the Boll Weevil and Pink Bollworm program has lead to us to obtain important results and advances. The cost of the program has been taken on by the producers and over fifty-percent of that is because of the federal government which amounts to approximately 28 million pesos or \$2.2 million. This resource almost goes directly to the payment of technical personnel. Hector also thanked Ted Boratynski who is always giving support with all of the problems they have had.

Hector reported that they are expecting that Mexico will have 153,000 hectares of cotton. They are hoping to be able to continue to enjoy the successful program, and the relationship with the United States government. There have been excellent results in both countries.

Ing. Hector Aguirre proceeded to give the power point presentation for Baja California, Mexico. Hector advised that this program would not be possible were it not for the efforts of the United States and Sanidad Vegetal.



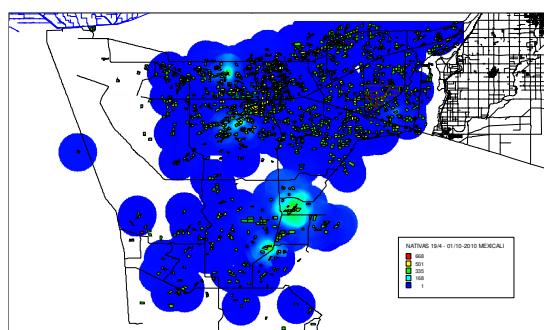
Hector showed a map of his area.

**RELACION Bt - NO Bt (Comparison of Bt to non-Bt)**

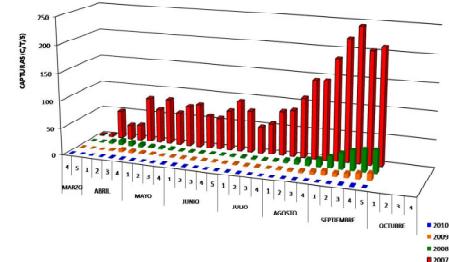
Año (year)	Superficie Total (Ha) (total hectares)	Algodón Bt (Ha) (Bt cotton)	Algodón No Bt (Ha) (non-Bt cotton)	Relación Algodón Bt-No Bt (%) (% of Bt vs. non-Bt cotton)
2005	20,112	6,034	14,078	36-64
2006	23,481	6,105	17,376	26-74
2007	20,643	12,799	7,844	62-38
2008	19,984	13,480	6,504	68-32
2009	17,385	13,614	3,771	78-22
2010	20,153	16,983	3,170	84-16



Hector showed a comparison slide of how many hectares of Bt versus non-Bt was grown in his area between 2005 and 2010. There were 822.6 million moths totaling 568 flight hours compared to 766.3 million and 383 flight hours in 2010.

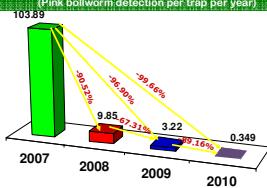


FONC, INIA, CACARRA  
CAMPAÑA CONTRA PLAGAS DEL ALGODONERO  
CAPTURA DE PALLAS GUSANO ROSADO (pink bollworm moth)  
EN TRANSACCION DIFTA EN EL MEXICO NORTE  
(pink bollworm moth captures — Mexicali)



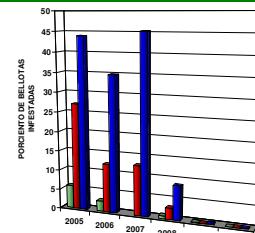
Here is a color-coded map showing the native captures. Blue is one capture and red is 668+ captures. This slide shows a weekly breakdown of pink bollworm moth captures in Mexicali from 2007 through 2010.

**DETECCION DE PALOMILLAS DE GUSANO ROSADO POR TRAMPA POR CICLO (Pink bollworm detection per trap per year)**



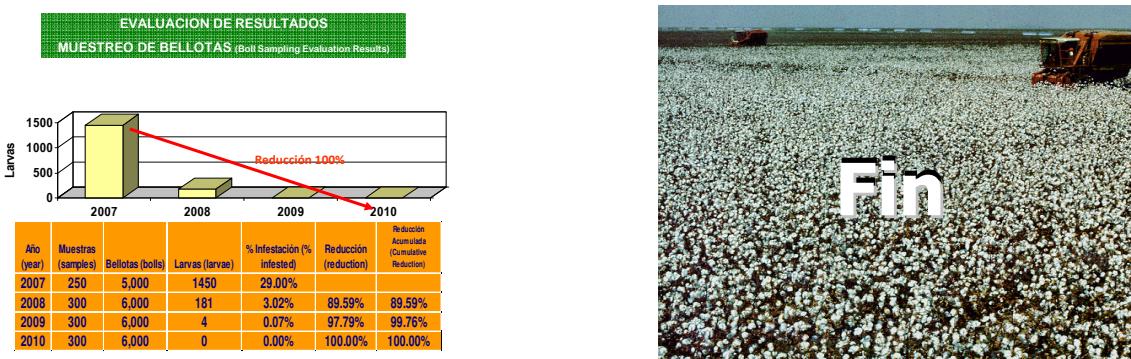
Año (year)	Promedio C/T/S (PBW capturas)	Reducción x ciclo (annual reduction)	Reducción acumulativa (cumulative reduction)
2007	103.89	-99.52%	-99.52%
2008	9.85	-99.60%	-99.60%
2009	3.22	-67.31%	-96.90%
2010	0.349	-99.16%	-99.66%

**MUESTREO BELLOTAS-GUSANO ROSADO (Pink Bollworm Bolt Sampling)**



BELLOTEO REALIZADOS 2010	
20	Predios (farms)
100	Bellotas por predio (bolts per farm)
2,000	Bellotas por belloteo (total bolts collected each time)
3	Belloteos (16 y 30 de julio y 13 de agosto) (bolts – pulled July 16 <sup>th</sup> , 30 <sup>th</sup> and August 13 <sup>th</sup> )
6,000	Bellotas totales (total bolts)

There was almost a 90% reduction in the capture rate of pink bollworm from 2009 to 2010. In comparing 2007 to 2010, they have a 99.55% reduction in captures. Boll sampling is performed three times throughout the season. You can see the reduction in the number of infested bolls from 2005 to 2010.



There has been a one hundred percent reduction in the number of infested bolls. Ing. Rene Yescas Dominguez gave the power point presentation for Sonora, Mexico.

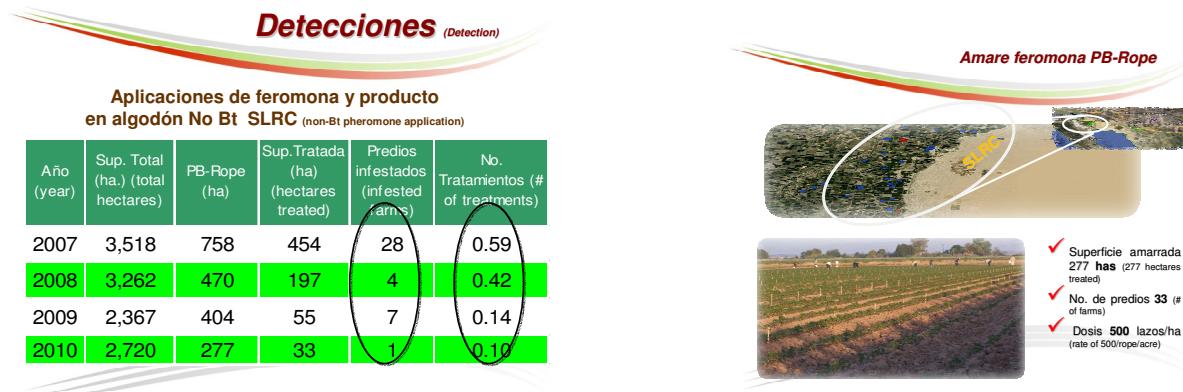


In the Sonora state we have a history there in the valley. This shows what cotton was grown over the last four years as well as the projection of 14,200 hectares for 2011.



This map shows that there was 937 hectares of cotton grown in Sonoita and 2,720 in San Luis, for a grand total of 3,657 hectares. Background: San Luis Transgenic Cotton per

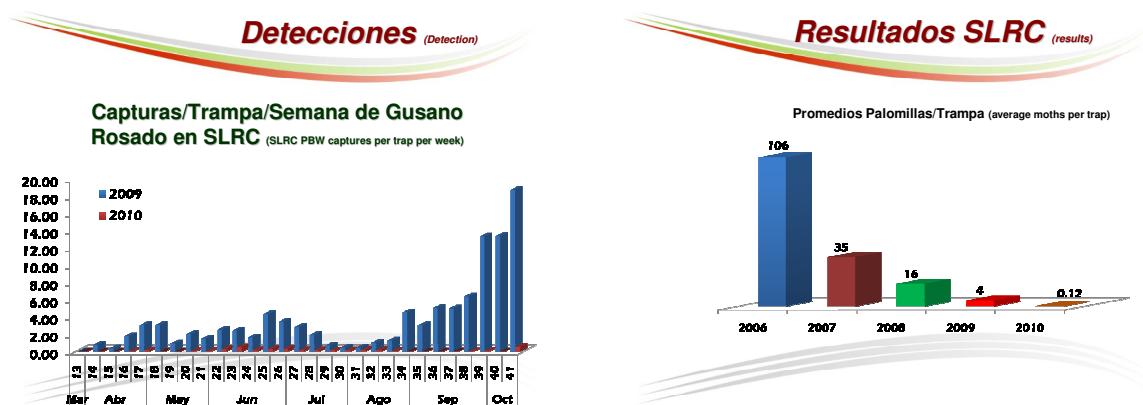
year; total hectares; Bt Cotton; non-Bt Cotton; percentage of Bt to non-Bt cotton. The total hectares are up somewhat, although lower than what was planted in 2008 and 2009. However, there was six percent more Bt cotton planted in 2010 as compared to 2009.



This shows a four-year history of PB-Rope applications. There were 277 hectares treated with PB Rope. Thirty-three farms were involved with a rate of 500 ropes per hectare.



Sterile Moth Releases for San Luis. The green dots are Bt cotton; blue is non-Bt cotton. Releases were performed April through September. There were 114 flights that dropped a total of 198.4 million moths. Pesticide Treatments for San Luis. The green dots are Bt cotton; blue is non-Bt cotton. They treated 33 hectares on October 16<sup>th</sup>.



Detection: Weekly average of captures per trap of pink bollworm in San Luis Rio Colorado for 2009 and 2010. You can see the average per trap in San Luis Rio Colorado over the last five years.

## **Resultados SLRC (results)**

- Se reduce 99.89% el porcentaje de incidencia (capturas/trampa) de gusano rosado en relación con el año 2006 sin programa de erradicación (There is a 99.89% reduction in the capture rate per trap when compared to 2006 when there was no pink bollworm eradication program.)
- Se reduce 97% el porcentaje de incidencia (Capturas/trampa) de gusano rosado en relación con el año 2009
- Se reduce el 29% el número de tratamientos de gusano rosado en relación con el año pasado (There is a 97% reduction in captures from 2009 numbers, and a 29% reduction in the number of treatments.)
- Se muestraron 40 predios con 4,325 bellotas, para medir la eficiencia de la feromona PR-Rope con resultados negativos y 1 predio con 100 bellotas que registró umbral 7 capturas en una trampa al final de temporada, el cual resultó positivo con larvas. (There were forty plots sampled with 4,325 bolls collected in order to measure the efficiency of the pheromone PB-Rope. One site with 100 bolls collected recorded seven catches in a trap at the end of the season, which is positive for larvae.)
- Se mantuvo la zona de baja prevalencia de picudo del algodonero. (This area has maintained a low presence of boll weevil.)

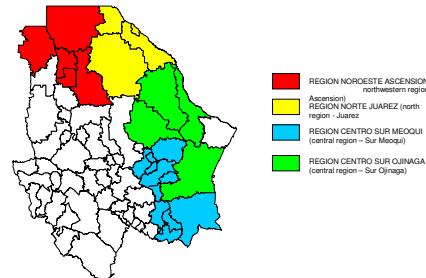
There is a 99.89% reduction in the capture rate per trap compared to 2006 when there was program. There is a 97% reduction in captures from 2009, and a 29% reduction in the number of treatments. There were forty plots sampled with 4,325 bolls collected in order to measure the efficiency of the pheromone PB-Rope. One site with 100 bolls collected recorded seven catches in a trap at the end of the season, which is positive for larvae. This area has maintained a low presence of boll weevil.

Upon inquiry, Rene advised that Mexicans also work on the Boll Weevil program, although they do not have a real issue with boll weevil in that particular area. Boll weevil results were presented in order to illustrate the team effort.

Ing. Jesus Escarcega Tarin gave the power point presentation for Chihuahua.



ZONAS ALGODONERAS DEL ESTADO DE CHIHUAHUA  
(states within Chihuahua that have cotton production)



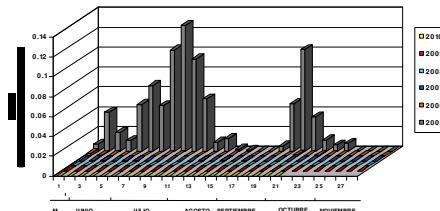
Jesus reported that the Chihuahua program has been operating since 2002. It is divided into four cotton zones including Ascension, Juarez, Meoqui and Ojinaga.



REGION NOROESTE (ASCENSION) (NORTHWEST REGION)

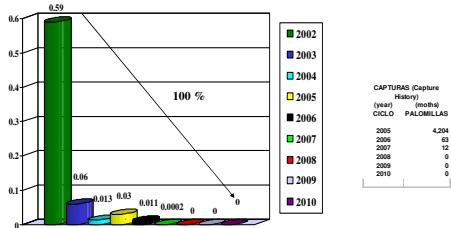
AÑO (year)	SUPERFICIE SEMBRADA (HA) (total hectares)	SUPERFICIE No Bt (Ha) (non-Bt hectares)	RELACION Bt-No Bt (comparison of Bt to non-Bt)	SUPERFICIE TRATADA CON PB ROPE (Ha) (hectares treated with PB Rope)	% TRATADA PB ROPE (percent treated with PB Rope)
2002	11,268	3,507	69-31	3,507	100
2003	16,499	5,177	68-32	5,177	100
2004	25,637	8,566	67-33	8,566	100
2005	23,088	12,332	47-53	8,936	73
2006	28,430	17,524	38-62	13,110	75
2007	29,228	20,848	29-71	1,118	5
2008	29,632	20,981	30-70	461	2
2009	10,209	7,047	31-69	0	0
2010	24,094	12,458	48-52	0	0

DETECCION DE LA PALOMILLA DE GUSANO ROSADO  
REGION 1 ASCENSION (PINK BOLLWORM DETECTION –  
REGION 1 – ASCENSION)



This slide shows the year, hectares planted, hectares of non-Bt, the relation of Bt to non-Bt, hectares treated with PB Rope and the percentage of hectares treated with PB Rope. The other slide shows a history of the average moths per trap broken down weekly.

CAPTURAS PROMEDIO POR CICLO  
REGION NOROESTE (ASCENSION) (AVERAGE CATCH PER TRAP PER CYCLE NORTHWEST REGION)



EVALUACION Y SEGUIMIENTO REGION NOROESTE (ASCENSION) (NORTHWEST REGION)  
ASSESSMENT AND MONITORING

AÑO (year)	TOTAL CAMPOS (total fields)	CAMPOS Bt (Bt fields)	CAMPOS No Bt (non-Bt fields)	CAMPOS INFESTADOS (Infested fields)
2002	60	16	44	5
2003	72	22	50	0
2004	108	35	73	0
2005	110	35	75	0
2006	168	38	130	0
2007	152	27	125	0
2008	53	0	53	0
2009	12	0	12	0
2010	33	0	33	0

This shows a history of the annual average of moths per trap. Here is the annual number of fields for Ascension. It is in its third year of being free from pink bollworm. We have maintained a use of conventional varieties due to water, etc. You can see how many fields are Bt and non-Bt and the number of infested fields. We treated with Rope at a rate of 500 ropes in the farms that we found the captures during the previous cycle.



REGION NORTE (JUAREZ) (NORTH REGION)



PB - ROPE



AÑO (year)	SUPERFICIE SEMBRADA (HA) (total hectares)	SUPERFICIE No Bt (Ha) (non-Bt hectares)	RELACION Bt-No Bt (Comparison of Bt to non-Bt)	SUPERFICIE TRATADA CON PB ROPE (Ha) (Hectares treated with PB Rope)	% TRATADA PB ROPE (percentage of hectares treated with PB Rope)
2002	5,251	3,528	33-67	3,528	100
2003	7,579	5,736	24-76	5,736	100
2004	8,689	6,177	29-71	6,177	100
2005	7,915	5,586	29-71	1,070	19
2006	8,898	6,840	23-77	1,063	16
2007	7,625	6,124	20-80	1,159	19
2008	7,371	6,383	13-87	194	3
2009	5,052	4,134	18-82	155	4
2010	8,169	6,183	24-76	129	2

DOSIS (Application Rate)	LOTES	SUPERFICIE (area)
500 cuerdas/ha.* (500 rope/hectare)	3	20
250 cuerdas/ha.** (250 rope/hectare)	11	91
500 cuerdas/ha.*** (500 rope/hectare)	7	18
<b>TOTAL</b>	<b>21</b>	<b>129</b>

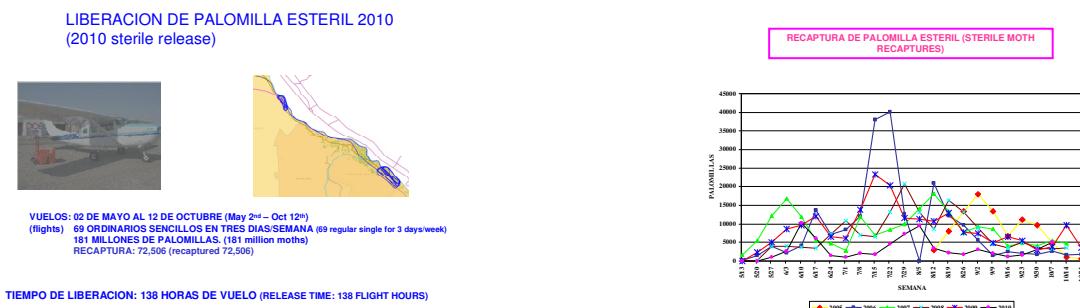
\* Por capturas del 2009 (2009 captures)

\*\* Predios adyacentes a predios con capturas del 2009 (land where 2009 captures occurred)

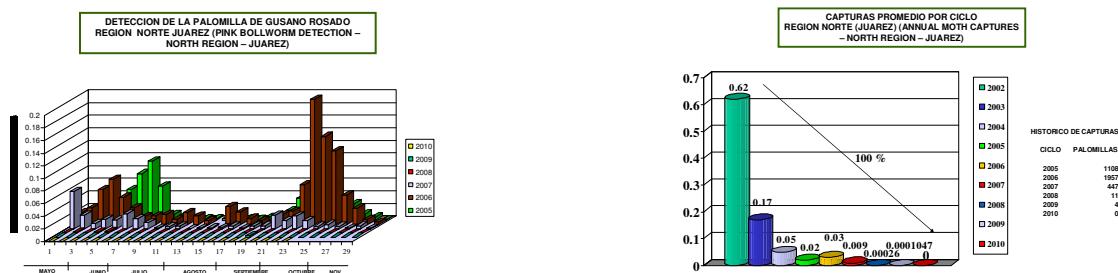
\*\*\* Predios cercanos a predios con capturas del 2009 (fronterizos)

(farms that border 2009 captures ??)

Juarez is north, east of Ascension. Slides show the history of hectares, corresponding percentages, total hectares of PB Rope annually, as well as the percentage in relation to the total hectares. The PB-Rope application rate depends on where 2009 captures occurred. It is important to protect the conventional cotton near Juarez. It borders the area that had captures in Texas. Dr. Staten requested that we protect that area.



They were flying three times per week from May 2nd through October 12<sup>th</sup>. The other slide shows the sterile moth recaptures. The number of moths that correspond to each week. The years are in different colors.



This slide shows a history of the average moths per trap broken down weekly. The years are color-coded. The other slide depicts the history of the annual average of moths per trap. There was none this year. Results were favorable, after having 11 captures in 2008. This year we have not had any up to this week, as you can see in this graph.

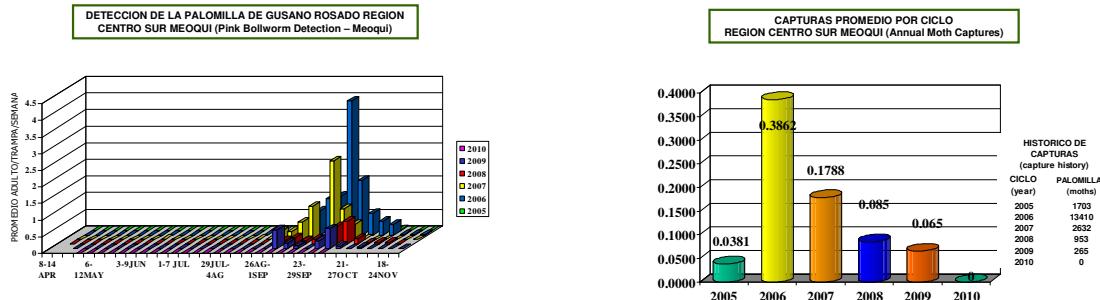
**EVALUACION Y SEGUIMIENTO REGION NORTE  
(JUAREZ) (EVALUATION AND MONITORING –  
NORTH REGION – JUAREZ)**

AÑO (year)	TOTAL CAMPOS (total fields)	CAMPOS Bt (Bt fields)	CAMPOS No Bt (non-Bt fields)	CAMPOS CON LARVA (Fields with larva)
2002	30	10	20	10
2003	42	10	32	8
2004	40	10	30	0
2005	40	9	31	1
2006	44	2	42	1
2007	36	0	36	0
2008	40	0	40	0
2009	28	0	28	0
2010	27	0	27	0

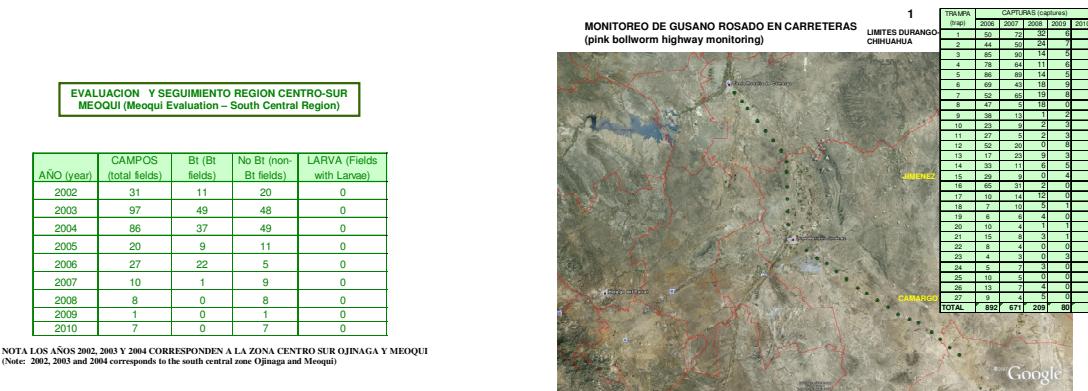
**REGION CENTRO-SUR MEOQUI (CENTRAL REGION – SUR MEOQUI)**

AÑO (year)	SUPERFICIE SEMBRADA (HA) (Total planted hectares)	SUPERFICIE No Bt (Ha) (total non-Bt hectares)	RELACION Bt-No Bt (comparison of Bt to non-Bt)	SUPERFICIE TRATADA CON PB ROPE (Ha) (hectares treated with PB Rope)	% TRATADA CON PB ROPE (Percentage treated w/ln PB Rope)
2002	930	164	82-18	164	100
2003	5,151	380	93-7	308	100
2004	9,332	278	97-3	278	100
2005	6,752	321	95-5	180	56
2006	4,332	2,195	49-51	139	6
2007	933	114	88-12	25	22
2008	1,558	266	83-17	12	5
2009	531	2	0	0	0
2010	1,703	254	85-15	0	0

This slide shows the annual number of fields for Juarez. You can see how many fields are Bt and non-Bt and the number of infested fields. Meoqui is located in the southeastern part of the State of Chihuahua. You can see the history of hectares for Meoqui with the corresponding percentages. You can also see the total hectares of PB Rope annually, as well as the percentage in relation to the total hectares for this area. In the South Central area, we have had a period with minimal captures. This area maintains a preference to transgenic use. Jiminez is close and uses (95%) conventional varieties.



This shows a history of the average moths per trap broken down weekly during the season. November 30<sup>th</sup> is the end date. You can see an increase in 2006. There were no captures for 2010 through this week. The years are color-coded. The other slide shows a history of the annual average of moths per trap annually.



Here is the annual number of fields for Meoqui. You can see how many fields are Bt and non-Bt and the number of fields infested (0). The other slide shows an annual break down of the pink bollworm trap line along the highway that we starting performing in 2006. This year also we did some monitoring on the roads form the border from Durango.



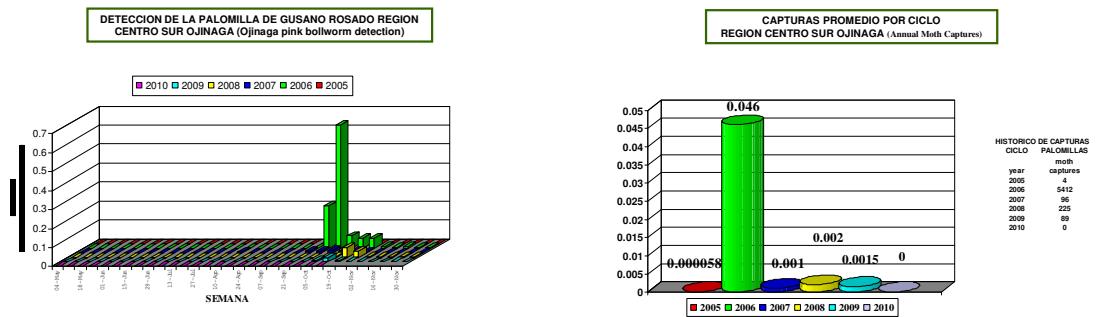
SUPERFICIE TRATADA CON PB-ROPE  
2010 (2010 PB Rope Treated Areas)



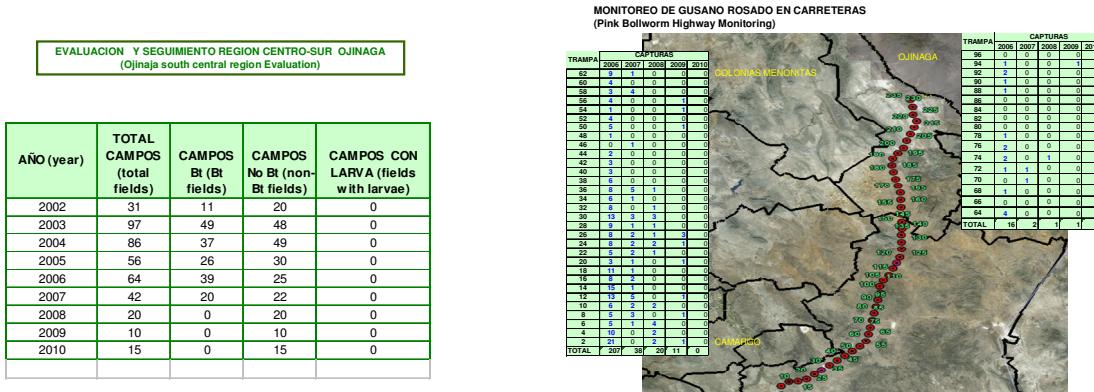
AÑO (year)	SUPERFICIE SEMBRADA (HA) (total hectares)	SUPERFICIE No Bt (Ha) (non-Bt hectares)	RELACION Bt-No Bt (Bt non-Bt comparison)	SUPERFICIE TRATADA CON PB-ROPE (hectares treated with Rope)	% TRATADA PB ROPE (% treated with Rope)
2002	1,382	803	42:58	803	100
2003	3,987	1,907	52:48	1,907	100
2004	3,534	1,764	49:51	1,715	100
2005	10,263	1,541	85:15	1,530	8
2006	20,102	3,721	81:19	245	7
2007	19,885	7,896	60:40	769	10
2008	19,611	11,418	42:58	248	2
2009	12,585	3,930	69:31	315	8
2010	27,220	3,938	86:14	78	2

LOCALIDAD (location)	PREDIOS TRATADOS (properties treated)	Has (hectares)	DENSIDAD DE CUERDAS/Ha. (density of ropes per hectare)
OASIS	1	40.5	250
NUEVA HOLANDA	1	37.4	250
<b>TOTAL</b>	<b>2</b>	<b>77.9</b>	

Here are the annual hectares for Ojinaga, non-Bt hectares, and a comparison of Bt to non-Bt. It also shows how many hectares were treated with PB Rope and the corresponding percentages. The other slide shows the number of hectares treated in Oasis and Nueva Holanda at a rate of 250 ropes per hectare. They seem to have a preference to conventional cotton. This time they used transgenic varieties instead.



This shows annually a history of the weekly average moths per trap captured for Ojinaga. The other slide shows annually a history of the average moths per trap captured.



You can see how many fields are Bt and non-Bt, and the number of fields infested (0). The other slide shows an annual break down of the pink bollworm trap line along the highway from Jiminez. We have not detected anything there. We are very satisfied with the personnel. We hope to continue in the following years to maintain that suppression. It depends very much on the south central. We will use of the pheromones. We hope we are able to continue doing that work, stop the migration and just work on the state to maintain these results.



Lindy Patton asked if they have had any problems reading the traps on a weekly basis due to the violence. Jesus explained that there have been some areas where we have run into these people. They have been respectful to our technicians. There are some areas that are more difficult. Ascension and Juarez there are some areas we cannot go into, but the area has been minimized.

Ing. Leobardo Aguilar gave the power point presentation for Durango, Mexico.



He stated how glad he was to be here and what an honor it is. He gave a special hello to the partners in the United States. He advised that his name was written down incorrectly. Ing. Aguilar reported on the slide identifies the location, as well as an area breakdown of the number of hectares where cotton is grown. Leobardo explained that the area is near

the center of the country; south of Chihuahua. Mapimi has 100 hectares; Tlahualilo 3,310 hectares, and Gomez Palacio 2,130 hectares.

#### Superficie Establecida.

Established Area

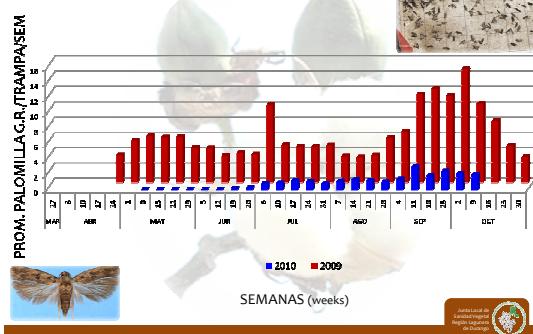


This slide shows the year, hectares planted, hectares of non-Bt, the relation of Bt to non-Bt, hectares treated with PB Rope and the percentage of hectares treated with PB Rope. This is a small history on the established program. In 2008, there was 164 hectares of non-Bt and no treatment. In 2009, all non-Bt was treated with PB Rope. Leobardo advised that in this region, it very much depends on transgenic cotton.

#### Acciones.



Promedio de Capturas de Palomilla Gusano Rosado por Trampa por Semana Ciclo Agrícola P.V. 1a/10.

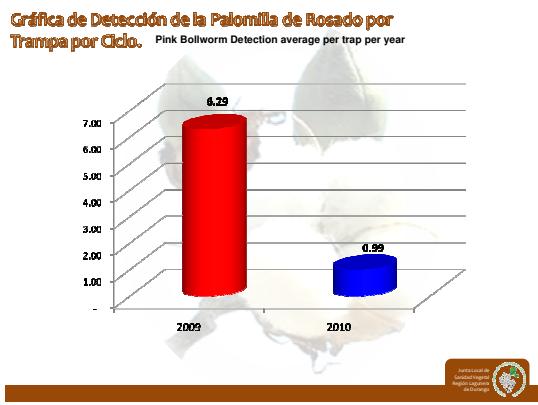


Trap density is one trap per four hectares on conventional cotton and one trap per twenty hectares of non-Bt cotton. In 2009, of the 172 ac on non-Bt cotton tied, it was accomplished in two sets of 250 ropes per set. This year, they did 500 ropes in one cycle. Leobardo advised that they are now in the "correcting phase." The 1,500 hectares had

several lots where there was a deadly disease. There were several lots where it was necessary to have them destroyed. Normally, the harvest is done mechanically, but this year they will have to do it by hand because there was very little cotton production.

The other slide shows the pink bollworm average trap captures per week throughout the season. The event had an impact on the numbers. Cotton leaf rust appeared to be concentrated in the lots where the conventional cotton (non-Bt) was planted. There was no fruit to harvest in those lots.

There was a different situation that occurred early in the season. Normally, they start March 5<sup>th</sup>. However, the area that manages 85% of the water had broke, and they had to fix it, thereby causing a delay.



Gracias Por Su Atención

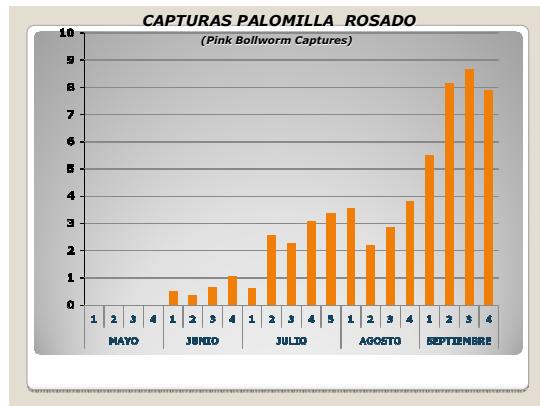
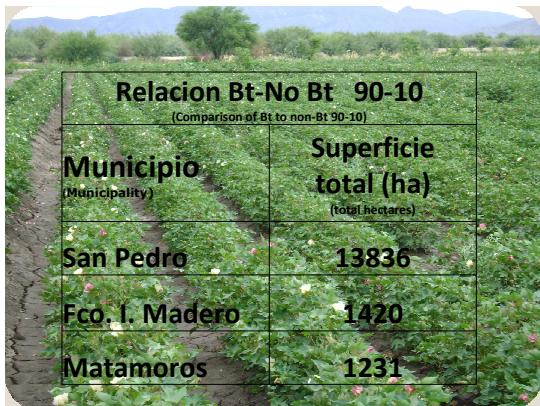


Leobardo advised that you can see the enormous difference they have had. In this area we do not do the sterile release, but we do Rope. This slide shows that there was 6.29 average pink bollworm captured during the 2009 season, and only .99 in 2010.

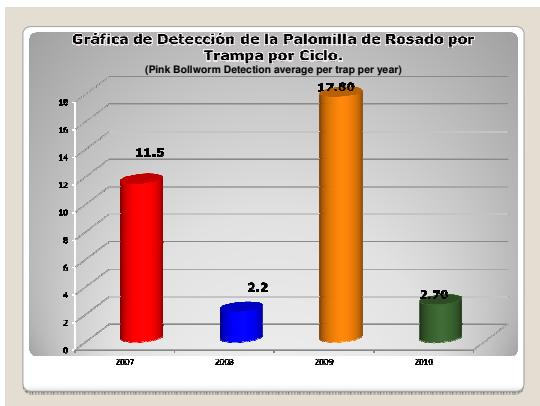
The discussion moved to the power point presentation for Coahuila given by MC Maria del Rosario.



There were 16,487 hectares grown during the 2010 cotton season in this area.



This slide shows the total hectares for each location. Overall, there is 90% Bt and 10% non-Bt cotton. Maria noted that although you see a reduction in 2009, it is not necessarily because of the actions that were done, but more likely because it is a region where we have lacked the participation of producers. There is also an issue with the technicians being unsuccessful in convincing the producers. Even a couple of years ago, they had incentive to join the program, but still elected not to participate.



This slide shows that there was 11.5 average pink bollworm captured during the 2007 season, 2.2 in 2008, 17.80 in 2009, and 2.70 in 2010. Maria advised that one might say that the 2.7 is high in relation to Durango, but in this region in particular, there was no Rope applied. It is a very simple presentation because they are just monitoring. They are hoping that in the following years they are able to convince the producers and be able to invest some more resources.

Greg Wuertz asked if there a plow down program in Mexico in any of their programs. Bob Staten answered that there may be in various areas, in particular where the Mennonites are large growers. Juarez is small compared to ascension. They are probably more similar to central AZ. Greg asked why they grow more. Bob reported that they have encountered difficulties in getting through the permitting process.

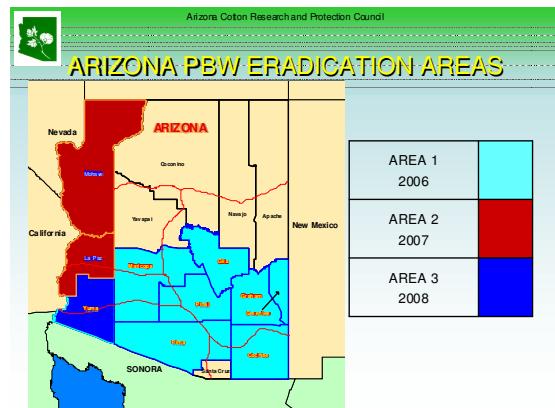
Larry Antilla reported that they have a lot to be encouraged about in Arizona, given the way the program is going.

Arizona Cotton Research and Protection Council

**ARIZONA PINK BOLLWORM ERADICATION**

**2010 PROGRAM UPDATE**  
**THROUGH OCTOBER 9, 2010**

PBWAC 2010



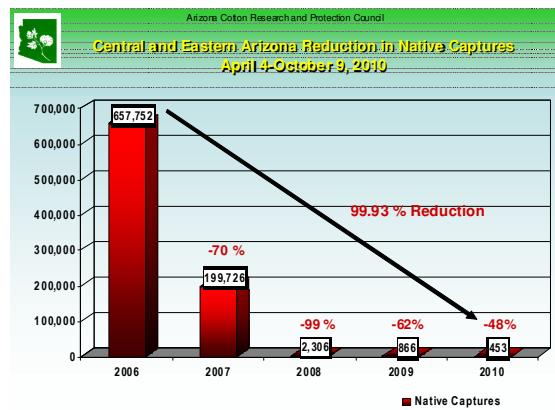
The light blue zone represents all of central and eastern Arizona, which is close to 85% of the cotton grown in Arizona. It is the largest zone we had back in 2006, and was completed in 2009. We were very encouraged with the results that came out of it.

Arizona Cotton Research and Protection Council

**PBW ERADICATION PROGRAM STATISTICS 2010**

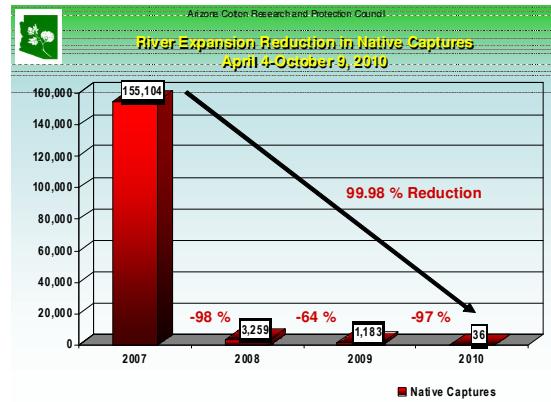
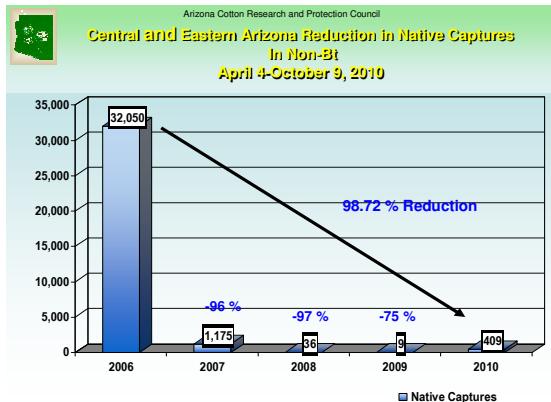
**CENTRAL AND EASTERN**

TYPE	ACRES	FIELDS
BT	160,867.72	4,515
PIMA	1,170.57	26
NON-BT	6,216.91	257
<b>TOTAL NBT</b>	<b>7,387.48</b>	<b>283</b>
<b>TOTAL ACRES</b>	<b>168,255.20</b>	<b>4,798</b>

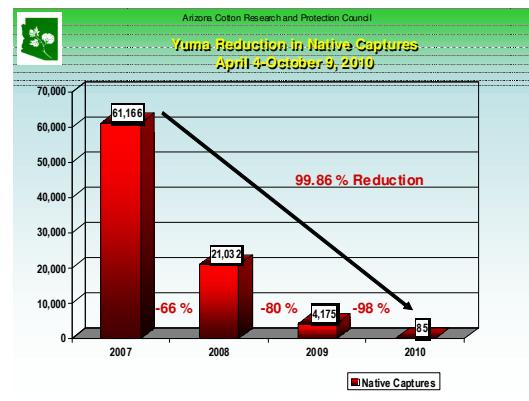
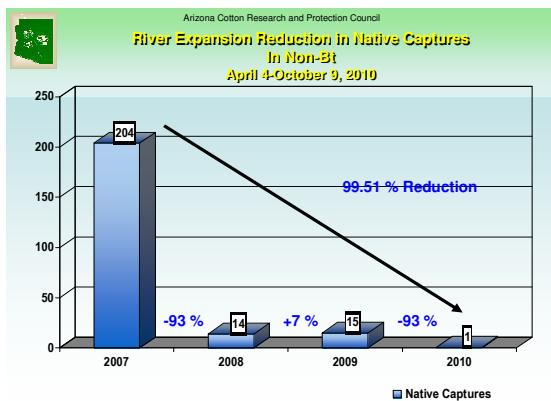


The first slide shows the total acreage we had in Arizona in 2010. We have a good ratio, noting the 96% Bt. In central and eastern Arizona, there's the bulk of the cotton at 168,000 acres. We were very encouraged about this because on the central and eastern portion in 2010, we did not put any pheromone on the non-Bt, so we were looking forward to seeing how the program would go and how the reductions would go.

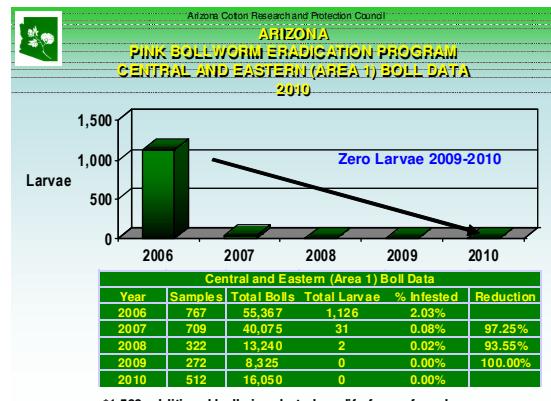
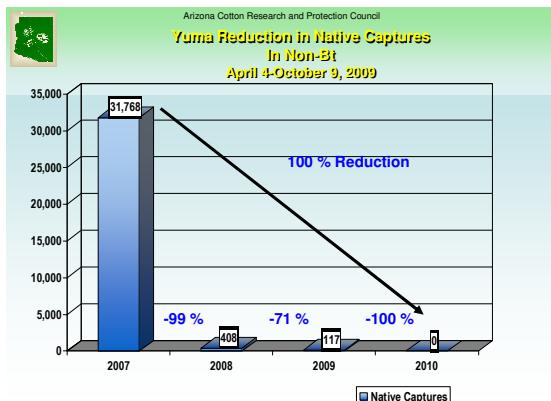
Both Dennis and Clyde would inquire throughout the season. In April, we caught one moth. In May and June; we did not catch anything. At the end of July and the beginning of August, we started to get some numbers.



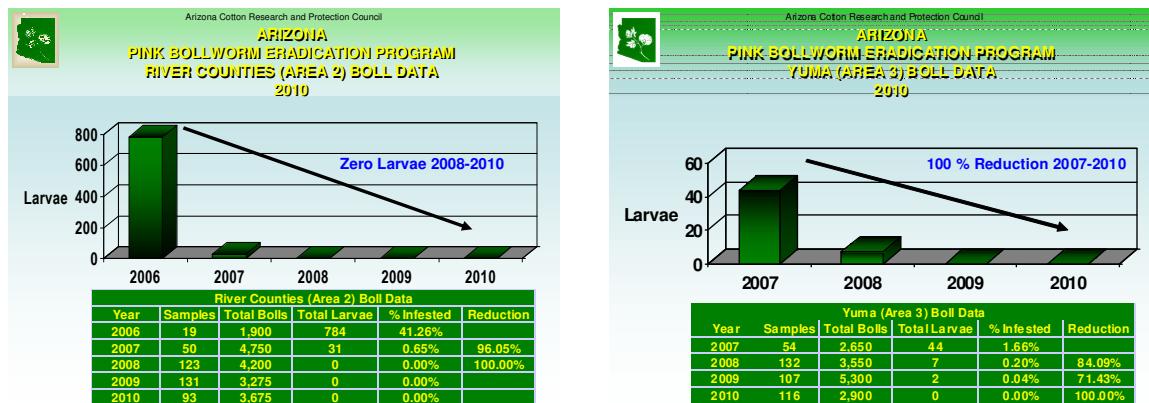
If you look at the numbers in the River Counties, there is very good reduction over time. In that area, there is only one capture in non-Bt cotton.



Yuma is our third zone and began in 2008. By statute, we have four years to complete it, so we have to make sure that the program doesn't run. We have very good reduction in Yuma too. In fact, we have not caught any native moths in Yuma County so far this year.

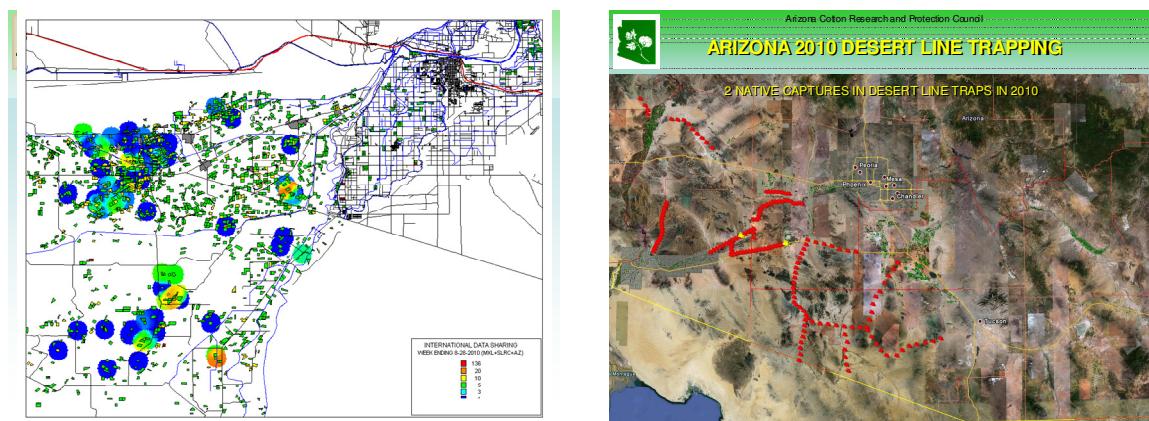


The larval populations are zero. In Central and Eastern Arizona, we have not caught a larvae in over two years. We have no larval finds in the River Counties, and so far nothing in Yuma County.

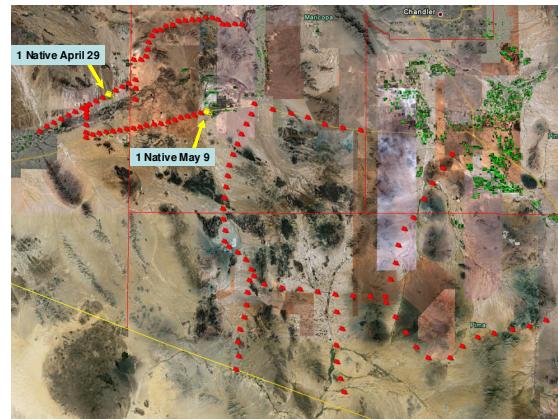


Even though there are captures here and there, we have not found anything in the boll samples, with more than 40,000 bolls sampled at this point. One of the things that is encouraging about the number of moths that we have captured (that we can't say are sterile), is that those captures came in late July and early August. We did not get anything over the winter to indicate that a population established and survived. We did not catch anything in early July, which would have been the F1 population of an infestation in Arizona, so the numbers are encouraging.

We had a meeting with San Luis Rio Colorado and Mexicali where we decided we weren't talking about an insect population divided by a river. We were talking about one basic population of pink bollworm that existed in this area.

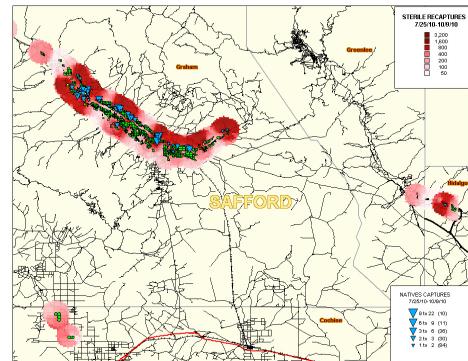
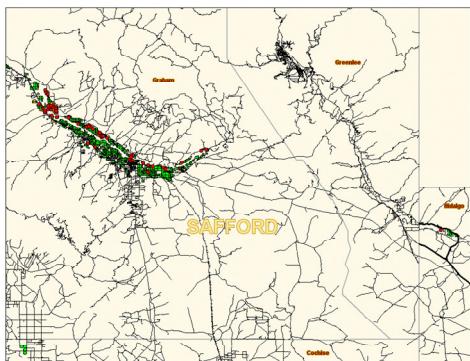


We shared data in order to indicate where our populations were and where they were moving. This is a thematic map showing that shared data. We were able to get a good feeling of where that population was going.



The other thing that has been encouraging to us is the results of our Desert Trap Line. We have run it for several years. This indicates that we only caught two moths in that trap line which were very early in the season.

In 2007, late in the season, this trap line averaged about 100 moths per trap. In 2008, because of the program activities in Yuma, San Luis and Mexicali, that was down to about 10 per trap. In 2009, that dropped to approximately one. These two captures that you see here in yellow are from very early in the season which tells us that this unified program has had a dramatic effect on those populations.



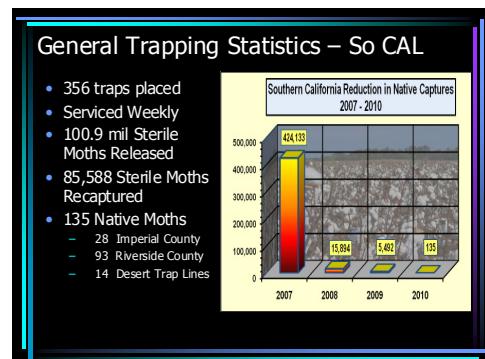
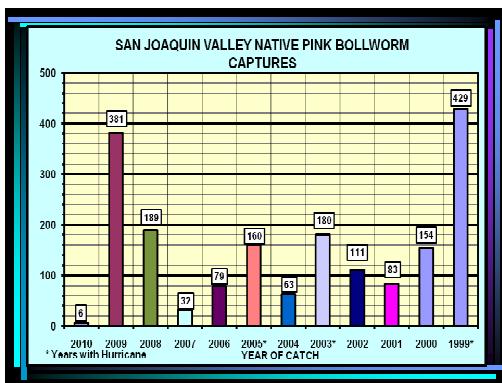
Again, here are those areas that we are concerned about. The late season captures (more than 400) we can't say are steriles, but believe they are from dye depletion, have given us cause for concern. This is the Safford Valley area where we should be pink bollworm free. The red dots represent a series of captures at the end of the season. There was nothing leading up to it. If you look at the total number of steriles released in all areas compared to our native captures, the very highest level of sterile release and recapture occur astonishingly in conjunction with those captures. We believe it's an anomaly related to the sterile moth release. We believe that the program is moving along very smoothly. We are very appreciative of all of the help we have gotten from the National Cotton Council, USDA APHIS and of course our cooperators in Mexico.



Dennis asked if there were any questions for Larry. There were none. Jim Rudig gave a power point presentation for California.



Jim reported he had a total of over 305,000 acres compared to 190,000 acres in 2009. Our acreage is going up. The 11,205 acres in Southern California was nearly 100% Bt cotton (we had one small half-acre research plot). We placed out nearly 4,000 traps. We only caught 6 native moths in the San Joaquin Valley (1 Fresno, 2 Kern and 3 Merced).



This slide shows some of the catches in our previous years. We would have to go back to the early 70s if you wanted to find a year where we caught less than six moths in a season. We do have a phenomenon noted that when hurricanes come up through Baja, California, we can see an increase in native moth catches. That occurred in both 2003 and 2005. As a result, we run a trap line in the Mohave Desert that is not associated with

any cotton. We did rope 205 acres in the San Joaquin Valley based on 2009 captures, and caught no natives.

In Southern California, we released nearly 100 million steriles and recaptured 85,000. The 135 native moths captured (28 Imperial County and 93 Riverside County) was as of October 16<sup>th</sup>. Jim learned from Ted yesterday that we picked up ten more native moths in Southern California. It still seems from our 2007 levels, when we first started the program, we have had a 99% decrease in native moth captures. As Larry mentioned, our Desert Trap line showed a vast improvement from last year. There were fourteen moths captured. There's a trap line that runs along the border of California and Mexico.

**Bt Resistance Monitoring**

- Boll collection at four (4) sites in B/PV Valley
- Boll collection at one (1) site in Imperial Valley
- No Resistance observed to date

Jim reported that they also do Bt resistance monitoring. They collect 500 bolls from five sites. No resistance has been noted. On behalf of the California cotton growers and CDFA, Jim recognized and applauded the Mexico Pink Bollworm Eradication Program accomplishments, especially Ted Boratynski and the work that he has done on behalf of both programs. Without Mexico's participation or excellent results, the U.S. border states would not be successful.

Dennis thanked everyone and reiterated how much we sincerely appreciate our partners in Mexico. We still have a lot of work to do, but it is amazing to see where we are at in this program. Dennis advised that the Pink Bollworm Technical Advisory Committee serves as a science for the advisors of the Action Committee. The Technical Advisory Committee made yesterday their reports.

Dr. Staten stated that it is a pleasure to be here. He will go through his entire report based on the motions that were passed. The first motioned that we entertained after a lengthy discussion of issues and assurances and diagnoses of sterile versus native moths, and the questions we are having, and the potential best resolution being that of the ability to use the transgenic DS Red moth. Mr. Craig Brown made a recommendation that we ask the Action Committee to insure that a task force is formed to pursue elimination of barriers from the use of DS Red and the work necessary to push us into a position where we choose to use DS Red. That resolution was made by Craig Brown and seconded by

Bobby Hull. We would ask that the Action Committee go forward with that. Dennis advised that he would entertain a motion to the effect to be read as recommended by the Advisory Committee that we make a task force simply for DS Red.

**M/S/P Clyde Sharp moved that the PBW Action Committee make a task force specifically for DS Red. Bobby Sloan seconded the motion and the motion passed unopposed.**

Dennis reminded everyone that those who will be voting are only the members of the Pink Bollworm Action Committee. The motion carried. Dr. Staten reported that Larry Antilla pushed forward a motion that we pursue alternate technology concerning all the additional marking tools, that we maximize our chances of finding solutions to this, specifically looking at elemental markers and diet additive markers such as rubidium and analysis of gossypol as a potential for solving as much as possible the question of where a moth came from when recovered in a trap. That motion was proposed by Larry Antilla. Jim Rudig seconded it and the motion was passed unopposed.

**M/S/P Bobby Hull moved to pursue rubidium and gossypol markers. Greg Wuertz seconded the motion and the motion passed unopposed.**

Dr. Staten advised that we had a motion from Bob Hull emphasizing the need for exploring a fourth alternative. It's one that was discussed extensively by Bruce Tabashnik and that was to explore the potential for using genetic mapping to see a lot more about where these insects might be coming from. We might even have the potential down the line of saying this particular genetic line came from Afghanistan or wherever. There is a lot of potential in genetic mapping and Bruce Tabashnik would like to pursue that. Dr. Staten advised that a motion from this Committee to pursue this type of activity would be most useful.

**M/S/P Larry Turnbough motioned to pursue genetic mapping as outlined by Bruce Tabashnik. Bobby Sloan seconded the motion and the motion passed unopposed.**

Dr. Staten advised that there is an item on the agenda, however Joe Plosky is not present. There is some work being done on the drop machines in order to try and improve the technology regarding load compressors and things of that nature. We have a motion from the Technical Advisory Committee that we continue pursuing upgrade technology for our drop machines. That motion was presented by Don Parker and seconded by Jim Rudig.

**M/S/P Clyde Sharp motioned to pursue upgrade technology for our drop machines. Greg Wuertz seconded the motion and the motion passed unopposed.**

Dr. Staten advised that importantly in dealing with the technical processes of 24Cs and dealing with sterile insects as refugia, as well as not using sterile insects as refugia but being able to call upon them when we have an area in the eradication confirmation phase, Charles Allen moved that we place the SCNMPBWCP and the Pecos section of the Trans Pecos area that it's in the Pink Bollworm Eradication Program into the Confirmation Phase with the exception of course of the small area that's in the El Paso, TX line. We will be treating that as a potential find, but it naturally still fits with all of these definitions. We have a motion by Charles Allen that it be placed in that status and then we have a second by Bobby Hull. Dennis asked if there is a motion by the Action Committee to move forward with this.

**M/S/P      Bobby Sloan moved to place SCNMPBWCP and Pecos section into a confirmation phase (minus the small area along the El Paso TX line). Jim Ed Miller seconded the motion and the motion passed unopposed.**

Dr. Staten reported that there has been considerable discussion regarding the number of moths needed this coming year. Of the tentative allocation of 140 million moths/week, 20 million moths/day was put forth. Bobby Hull motioned that we should accept the 140 million moths per week as put forth in the spreadsheet for next years beginning moth application. Don Parker seconded the motion.

**M/S/P      Clyde Shard motioned to accept the number of moths needed this coming year (140 million moths/week) and break down as reflected on the spreadsheet as presented by Dr. Staten at the TAC meeting. Larry Turnbough seconded the motion and the motion passed unopposed.**

There was a break. Dave Peirce and Rick Lavis (advisor) arrived for the second half of the meeting. Dennis reported a few changes in the order of presentations. We will first hear from Don Parker, then from Ernie Miller, Jerry Levitt and Dave Peirce.

Don Parker advised that the NCC has been involved with EPA, in particular explaining our Minimum Standards Document developed last year. We needed agreement with our definitions, especially the Confirmation Period (we would still request a 24C exemption for program areas, but would not release sterile moths as a refuge). The concept being that once an area enters the confirmation period, there are no pink bollworm. We had three meetings. The EPA has indicated that they are comfortable with the definitions as stated in the Minimum Standards Document. The mitigation procedures in place should a moth be captured was a very helpful point. They had requested a white paper concerning why this was not a risk for resistance development in pink bollworm. We met with Dr. Staten and Dr. Tabashnik in Arizona, both who are on our Technical Advisory Committee.

Currently, we are trying to negotiate the wording or phrasing for the label. Once accomplished, we will try and get amendments for our existing 24Cs (three counties and NM program). The only places in the country that are required to have a refuge for Bt cotton are California, Arizona and New Mexico in that pink bollworm area of west Texas. The 24Cs allow exemptions for program areas. Counties that are not included in the 24Cs do not have an exemption and would be required to have a refuge. That means that once we do the exemption for the three counties, most of the state of New Mexico will still be required to have a Bt cotton refugia.

Upon inquiry, Don answered they anticipate the 24C will be in place for the 2011 thereby allowing the three counties to have an exemption and plant 100% Bt cotton. Joe Friesen asked what the drop dead date was. Don advised that he would check with EPA and work very close with Joe. Upon inquiry, Don advised that if outside of a pink bollworm program area in Texas, a refugia is required. There were no more questions.

Dennis requested Ernie Miller give his presentation concerning changes made in irradiation protocol at the Rearing Facility, and review current procedures.

#### Procedures used in the PBWRF to irradiate PBW moths



#### PBWRF Irradiation Procedures

- Review of current moth irradiation procedures used in the PBWRF.
- How current procedures differ from those used from 1990 - 2009.

The moths are dropped out of the cyclone system, put in trays and transferred into the radiation canisters. A vacuum removes scales. Each canister holds about 180,000 moths.

#### Moths removed from collection system & placed in holding trays

- Moths collected from cyclones in aluminum trays.
- Trays stacked on carts.



#### Moths transferred from holding trays to irradiation canisters

- During the transfer the loose scales are removed with a vacuum hose attached to our scale removal system
- Filled canisters, each holding ca. 180,000 moths.
- The top of each canister has a new dosimeter attached



This year we attached a dosimeter (double taped to the top), which determines radiation. Once they are lowered on to the canisters, they go into the irradiation room. Each

canister has a barcode ID and a number (1-200). We never have more than two canisters in irradiation at one time.

### Irradiation canisters ready for irradiation are placed in pass through

- Each canister ID with written number and a barcode.
- Once filled with moths the canisters are maintained at 40F.



### Irradiation room task #1 prior to irradiation

- Confirm dosimeter is in place on canister top
- Check Dosimeter to determine it is properly labeled with correct canister #.



Once the insect reaches the adult stage, we maintain the temperature at 40 degrees until they are released in to the field.

### Irradiation room Task # 2 prior to irradiation

- Record canister numbers on Tracking sheet



### Irradiation room Task #3 prior to Irradiation

- Scan bar code on canister.
- Confirm Laser Lite Pro Scanner has read barcode by beep message sent by scanner



Now they are recording the numbers on the canisters on a tracking sheet. The bar code is new this year too. The bar code is scanned and they will wait for a signal (beep), so that they know it has been accepted.

### Task #4 Irradiation of moths

- Two canisters of moths in irradiation chamber at once
- Timer preset to give moths a 20 kr dose of  $^{60}\text{cobalt}$ .



### Task #5 confirm Irradiation

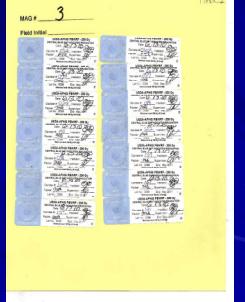
- Exam dosimeter for color change to blue
- If dosimeter all blue initial dosimeter .
- Cross off canister numbers on tracking sheet



There are two canisters at one time which total about 350,000 insects per irradiation. Once they are placed into the irradiation chamber and it is closed, they push a button and it's given a dose of 20 kr (cobalt 60).

<p><b>Task # 6 canisters placed in pass through to shipping room</b></p> <ul style="list-style-type: none"> <li>■ Moths placed in shipping room pass through with dosimeter still attached.</li> </ul> 	<p><b>Shipping room Task #1</b></p> <ul style="list-style-type: none"> <li>■ Pull 2 canisters from pass through and exam the dosimeter to determine if color area is all blue.</li> <li>■ If all blue initial and remove dosimeter from canister</li> </ul> 
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Following irradiation, the person examines the dosimeter for a color change. The dosimeter center circle becomes the same color as the background, which responds to an exposure of a dose of 18 to 20 kr. If upon inspection, they see that the dosimeter is totally blue, they will sign off of it. At the same time they cross off that canister they sign that canister off on the tracking sheet. The canisters are then transferred to the shipping room. In the shipping room the person that is providing that service for us examines it again to make sure that the color area is blue. The dosimeter is removed. This is what we call an irradiation confirmation sheet.

<p><b>Shipping room task #2</b></p> <ul style="list-style-type: none"> <li>■ Adhere dosimeter removed from canisters to radiation confirmation sheet.</li> <li>■ Each magazine of moths shipped will have from 10-14 dosimeters on the irradiation confirmation sheet</li> </ul> 	<p><b>Shipping room task #3 transfer moths from irradiation canister to shipping Mag.</b></p> <ul style="list-style-type: none"> <li>■ Moths are poured from canisters into shipping magazine.</li> <li>■ Each magazine is filled while sitting on a scale and filled by weight based on a the previous three day avg. moth weight</li> </ul> 
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In addition to having a signature or confirmation of irradiation by the packer, a supervisor also signs this off. Each one of the magazines we ship, have anywhere from 10-14 dosimeters on the irradiation sheet. In addition to the canisters that were irradiated, we also identify the magazine that is being shipped and also the location. The one pictured on this slide is going to Mexicali. Once the confirmation is made by the person in the shipping room, they remove the tops off of the canisters and begin filling these magazines (holds 2 to 2 ½ million insects). The magazine itself is placed on a scale.

### Shipping room task #4

- Confirm correct magazine number is on confirmation sheet
- Place confirmation sheet on top of mag.
- Load into shipping box.



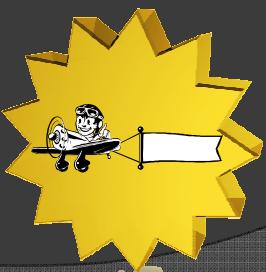
### Key differences between 1995-2009 & 2010 Irradiation protocols

- Dosimeter placed on canisters and labeled in moth collection instead of Irradiation
- Once moths enter irradiation room a more precise and documented tracking system from the point of irradiation to the field locations.
- Redundancy in irradiation confirmation in the facility
- Confirmation to field

We will generate an average total gram weight. Once that is completed and poured into the magazine, we will take that irradiation confirmation sheet and verify it is the correct one for that shipping container. We then load the shipping magazine into the exterior box and it is ready to go to the field.

One of the key differences is that we took some pressure off of the person in the irradiation room by adding the dosimeters. There is a lot more documentation and verification from the point of irradiation to the field locations. The biggest improvement is the redundancy of irradiation confirmation. In the old system, we used one person for that confirmation and now we are using three. Additionally, once it gets to the field, you have a confirmation for each specific irradiated canister, which can be kept throughout the season or longer. We should discuss a specific length of time to keep the confirmation sheets. There were no questions.

Dr. Staten requested that the confirmation sheets be held for no less than one year. Dennis then called up Dave Pearce and advised that Dave will be reporting on some issues that we have encountered with releases near JCM Farms.

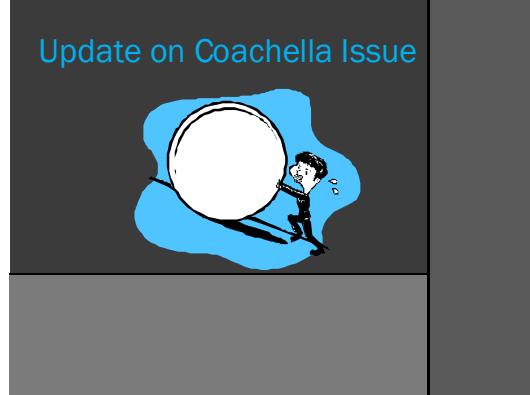
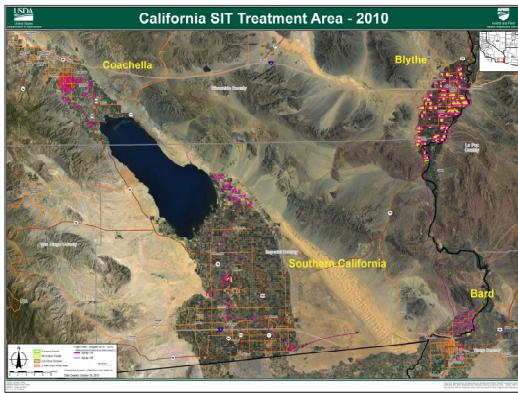


**2010 California SIT**

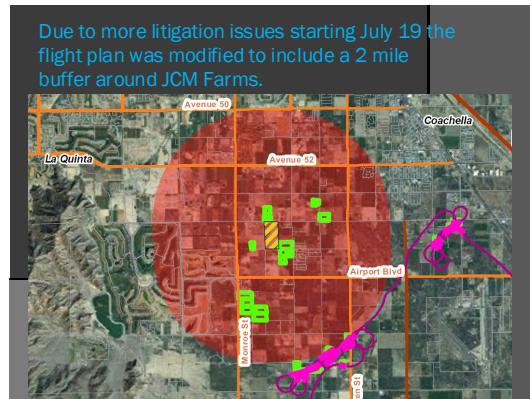
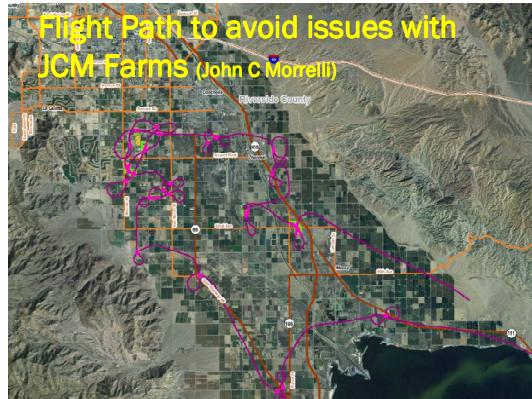
### Vitals for 2010

- Start Date: April 4, 2010 Bard
- End Date: October 8, 2010 (So Cal. Crochella)
- Total Flight Time: 265 Hours
- Total Cost: \$108,650.00 In Budget
- Number of Fields Released On: 285
- Types Crops Treated: Non BT, BT & Okra
- Approximate Number of Insects: 131,855,400.5

Dave introduced himself advising that he is taking Aaron Miller's place due to a back injury. Dave acted as the COR on this project this year working with the contracting officer. It was a gold star year. It was successful. The season ran from April 4th in Bard through October 8th in Southern California / Coachella. There were a total of 285 fields including Bt, non-Bt and okra. There was a \$108,650 budget that included 265 flight hours and dropped almost 132 million insects. They were well within budget.

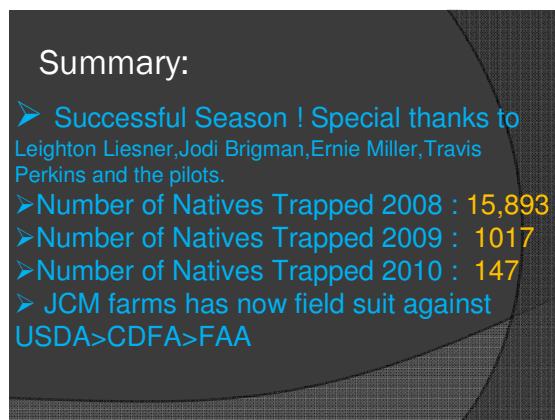


The area that we are talking about is Coachella, Blythe, Southern CA and Bard. These are flight paths of the aircraft. Dave showed an aerial view of the release areas. Dave discussed the Coachella issue where a farmer was concerned about the SIT releases. Dave showed a map illustrating the flight pattern that was performed in order to accommodate their concerns. The yellow plot is JCM Farms. We organized the flights around this property making sure that we did not cross his property in any way, even though we had the right to do so, and made sure the elevations and altitudes were correct.



We did it in a couple of ways including using the GPS tracking. Jodi Brigman was on board for a couple of flights, and even had people on the ground. We did a very good job confirming that we were a good neighbor with this gentleman. Later in the season, starting July 19<sup>th</sup>, due to some litigation issues between the contractor and his insurance person, we placed a two mile border around his farm to further accommodate his concerns. Unfortunately, this resulted in fifteen okra fields being excluded from

treatment until August the 23<sup>rd</sup> (142 acres; 15 fields), when we back to this regimen and continued it through the rest of the year. In summary, we think that it was a very successful season. The number of natives trapped in this area in 2008 was 15,893; 2009 1,017 and 147 in 2010. It looks like we are doing well. JCM Farms has now filed suit against USDA, CDFA and the FAA.



Dennis Palmer asked if there were any questions for Dave. Craig Brown asked that with this latest suit, has there been a request for an injunction? Jim Rudig answered that the JCM attorney did file in Superior Court Riverside for a temporary restraining order. It was not granted by the court. However, the lawsuit you are referring to is another lawsuit. When he tried to get immediate court relief to stop us, the court did not grant it. Dave Pierce advised that this was done the 8<sup>th</sup> of October.

Dennis advised that our last presenter will be Jerry Levitt. He will discuss some Quality Control issues and some personnel changes. Jerry Levitt distributed a hand out advising that he recently put together a draft of the Quality Assurance program for the trapping program. We've already gone over the quality control program, issues with the dye, and the next logical step for this process is to insure for next season that we have a good quality assurance trapping program.

Jerry Levitt distributed a draft that he would like to implement by next year. The first page is the three step procedure he would like to use throughout the season. The second page is a chart that will come with the moths as they are sent out to the individual program managers. This was initially sent out late in the season. He received one comment back and made some adjustments at that time. Basically, there will be three cycles of quality assurance testing during the season.

Early on in the season, we will actually send out dead DSR red moths. We have found we can do that. We have a small colony we are maintaining for research purposes. We can kill those and set them out. They will come out to the program manager. At that point, the program manager will get this chart on the second page and they will be asked

to put out the moth themselves. They will test their own trappers and see how they did. It is pretty straightforward. We would like those results back.

Halfway through the season, around July 30<sup>th</sup>, we would send out the Assistant Facility Director to work with the individual program managers and go out to the field with them and actually learn what's going on in those individual areas, as well as working with the program managers to put out the next set of moths to assess the trappers and see how the program is going.

Later in the season around Aug. 15<sup>th</sup> – Sept. 15<sup>th</sup>, we would like to do a blind quality assurance test that would be done only by the Assistant Facility Director. Obviously, he would have to have to get maps to see where to put the moths out. He will be in contact with the local program managers. The program manager would know that there is going to be a test run in their area, but we are really trying to do a blind test. Michelle will continue to supply the moths for all three tests.

This is our rough draft of a three phase quality assurance program we are proposing. If you have comments, concerns or questions on it after you get home and really have a chance to look through it, e-mail Michelle or Earl. Their contact information is on there. Jerry concluded that he would like to have this in place by next year.

Clyde Sharp commented that although there may be a few modifications after everyone reviews the details of the Quality Assurance Program, it is important to vote on what Jerry has presented as he is asking for a recommendation from this Committee to move forward with it.

**M/S/P              Clyde Sharp motioned to instruct this Committee to continue to work on this and we implement it for next year (the three-phase Quality Assurance Program as proposed by Jerry Levitt). Bobby Hull seconded the motion and the motion passed unopposed.**

Jerry Levitt reported that there will be some significant changes at the Rearing Facility soon. He advised that Earl Anders, Assistant Director, has accepted a position in southern California working for the Fruit Fly program. He will be leaving within the next month. Earl has been responsible to deal with a lot of issues including personnel and safety as well. He has done an excellent job and we appreciate his efforts. Jerry Levitt presented Earl with a Certificate of Appreciation.

Jerry Levitt reported that Ernie Miller has forty-two years of government service, and may retire this April. Jerry was hoping he would wait a year, but we may have to fill his position. Once Ernie puts in his papers, we feel we can get someone in there fairly quickly at least in the acting role, and hopefully someone who will need to gather some knowledge before Ernie departs.

Dennis expressed how much we appreciate Earl and will miss him. Dennis thanked everyone for their service. Dennis advised that this concludes the agenda.

**M/S/P**      **Clyde Sharp moved that our Committee go into Executive Session with just the staff from NCC and Dr. Staten before we dismiss.**  
**Bobby Hull seconds the motion and the motion is unopposed.**

Dennis advised that we will not reconvene, so this adjourns the Regular Meeting. See you in another year.

**10/26/2010 NCC PBW AC RESOLUTIONS (MOTIONS)**

***DRAFT (MINUTES NOT APPROVED until next meeting in October 2011)***

- M/S/P** **Bobby Hull moved to approve the 2009 NCC PBW Action Committee minutes as presented. Clyde Sharp seconded the motion and the motion passed unopposed.** (page 2)
- M/S/P** **Clyde Sharp moved that the PBW Action Committee make a task for specifically for DS Red. Bobby Sloan seconded the motion and the motion passed unopposed.** (page 32)
- M/S/P** **Bobby Hull moved to pursue rubidium and gossypol markers. Greg Wuertz seconded the motion and the motion passed unopposed.** (page 32)
- M/S/P** **Larry Turnbough motioned to pursue genetic mapping as outlined by Bruce Tabashnik. Bobby Sloan seconded the motion and the motion passed unopposed.** (page 32)
- M/S/P** **Clyde Sharp motioned to pursue upgrade technology for our drop machines. Greg Wuertz seconded the motion and the motion passed unopposed.** (page 32)
- M/S/P** **Bobby Sloan moved to place SCNMPBWCP and Pecos section into a confirmation phase (minus the small area along the El Paso TX line). Jim Ed Miller seconded the motion and the motion passed unopposed.** (page 33)
- M/S/P** **Clyde Sharp motioned to accept the number of moths needed this coming year (140 million moths/week) and break down as reflected on the spreadsheet as presented by Dr. Staten at the TAC meeting. Larry Turnbough seconded the motion and the motion passed unopposed.** (page 33)
- M/S/P** **Clyde Sharp motioned to instruct this Committee to continue to work on this and we implement it for next year (the three-phase Quality Assurance Program as proposed by Jerry Levitt). Bobby Hull seconded the motion and the motion passed unopposed.** (page 40)
- M/S/P** **Clyde Sharp moved that our Committee go into Executive Session with just the staff from NCC and Dr. Staten before we dismiss. Bobby Hull seconds the motion and the motion is unopposed.** (page 41)

***DRAFT (MINUTES NOT APPROVED until next meeting in October 2011)***