



Migratory Beekeeping Follow the
nectar ~ by Gottfried Fritz

Always looking for the Motherflow



Reasons for migration (Multiple flows)

1. Can produce own queens & control requeening
2. Longer build up in mild climate
3. Greater summer yields from stronger hives
4. Can harvest more of reserves in fall
5. No long winter of inactivity
6. Additional income from pollination and citrus



Issues of Migration

1. Expense & stress of transport
2. Safety issues and bee loss in travel
3. Exposure to disease & pests
4. Additional expense of two locations
 - a. Need some extraction capacity at winter location
5. Care of summer facility during winter



Local migration (with varying forage)

- Travel usually less than 300 miles
- Use medium (2.5 ton) trucks for transport and harvest. 200 to 500 colonies.
- All extraction & processing in one location
- Seasonal travel with crop and conditions



Location –Central valley of California (1950s)

- 1. Almonds---Early Feb to early march



Lower valley ----Bakersfield to Fresno

Citrus– Oranges & Lemons

- 1. Lower and central valley-near irrigation
- 2. Mainly Fresno, Tulare and Modesto
- 3. Highly sought after type of honey
- 4. Mid March to mid April



Cotton and Alfalfa

- Lower and middle central valley—Hanford and Shafter area
- Major problems with pesticides & alfalfa often cut before blooming
- Late April through July



Sage and buckwheat

In foothills east and west of southern and Central valley of California
Very light—almost clear. Often referred to as the finest tasting honey in the U.S.



Sage



Buckwheat

Long distance migration 1000+ Mi

- Medium size operation 500 to 1200 colonies
- Two 2.5 ton trucks plus one flatbed 1 ton pickup
- During the mid to late 1960s
- Two full time and 2 to 4 seasonal workers

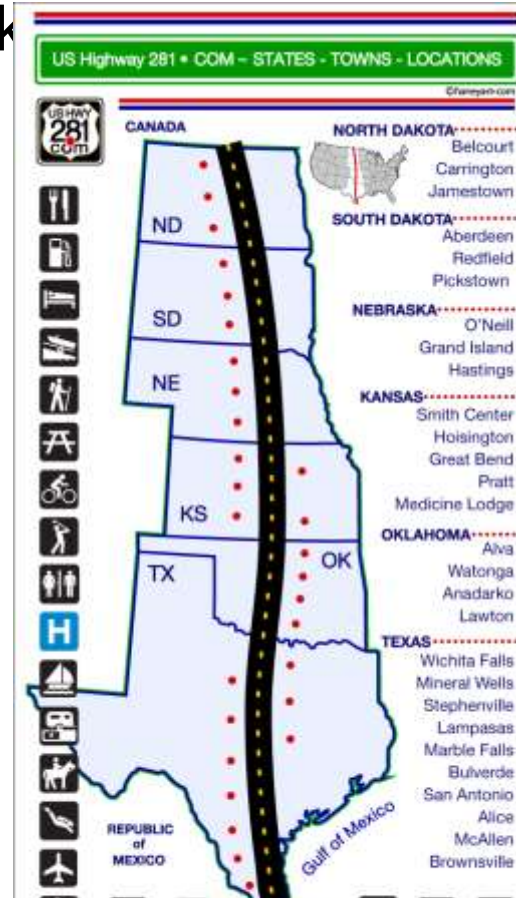


U.S. Highway 281 border to border

From Canadian to Mexican borders 1900 miles

Lake Andes SD to Weslaco TX 1350 miles 29 to 32 hrs

Loaded trucks had 120 double hives per truck



South Texas

- 1. Tropical climate with citrus crops
- 2. King Ranch with square miles of range land with plants that bloom during winter months.



Winter forage in the Tx brush

Flowers and brush bloom after fall rains
Colonies build up in Dec and January



Queen rearing

January and February

Build up colony strength and graft eggs



Citrus and spring build up

- March and April –into citrus groves
- Make splits—many hives moved north as singles



Load hives for trip North

- Take strong hives in first loads
- Try to get hives to SD by May 1 for dandelion for fast build up.



Grasslands of South Dakota

- Much undeveloped land along Missouri River
- Yellow and White sweet clover natural flora
- Large areas of soil bank on fringe of cultivated crops



Main forage –Sweet Clovers

- Blooms June to mid August



Alfalfa-great when soil banked

- July and August
- Many farmers allow short bloom when making hay.



Harvesting and shipping

- Mid July to early Sept
- Honey sold wholesale in 50 gallon drums



Ready to head south

- 4 Truck loads between mid to late Sept
- 1 Truck load of supers in October



Large operation 1000+ miles

- 1990s to present
- 5000 to 10000 colonies
- California to Minnesota 1870 miles
- Medium size trucks and forklifts or bobcats for moving hives
- Semi trucks and trailers used during spring and fall moves
- 3 or 4 full time plus seasonal workers

Joe Tweedy—Oakdale Ca and Eagle Bend Minnesota

- Multi generations
- Joe now retired



Bees back to California

- Mid September to Mid October
- Semi truck and trailer---500 doubles 750
- Travel time is 30 to 35 hours- cross 2 mt ranges
- Route is Mn to Nd to Mt to Id to Nv to Ca



East west travel route



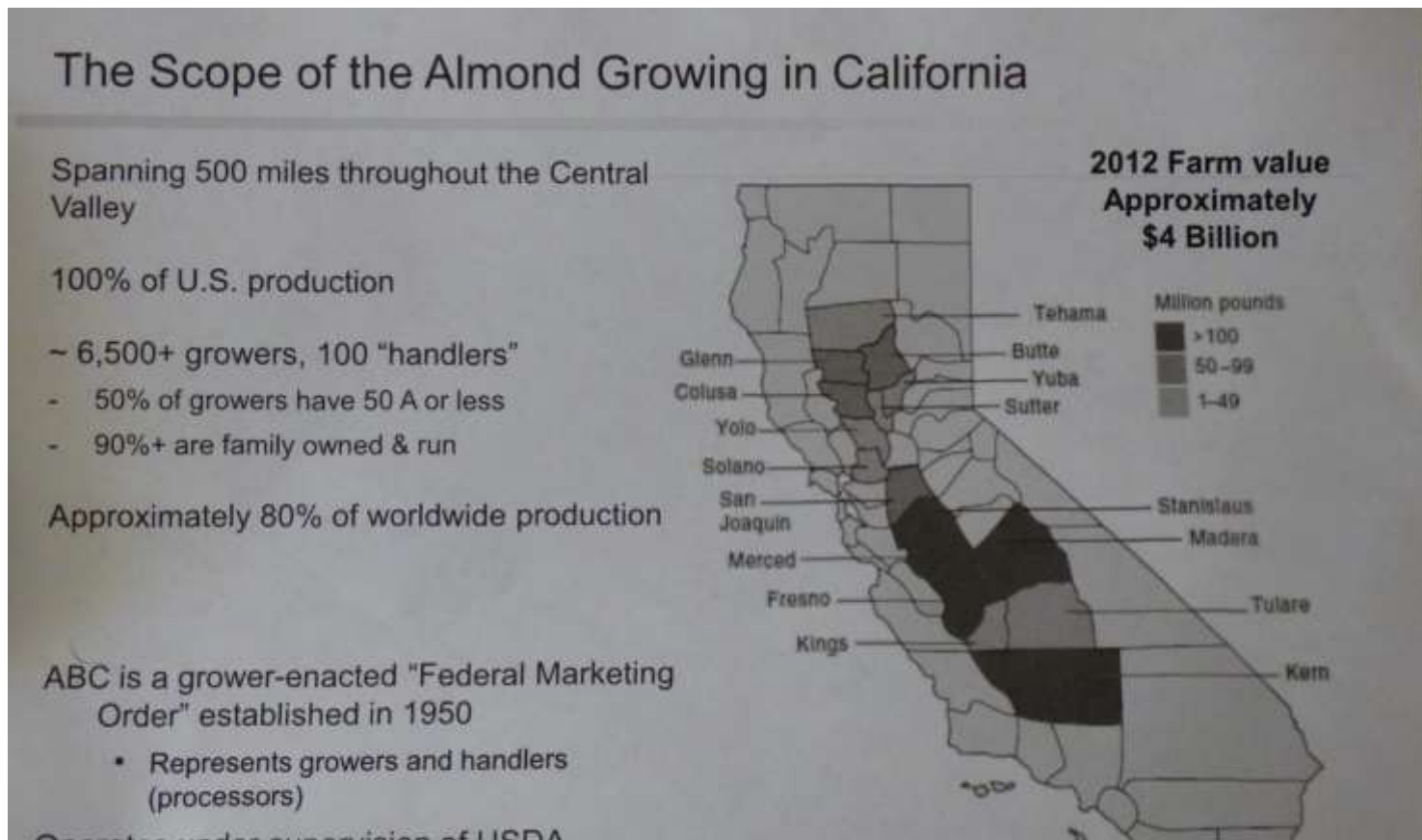
Feeding and colony build up

- December-January increase resources
- Raise some queens



Almond Pollination

- Feb to mid March
- 3 hives per acre (average pollination fee \$175/h)



Colonies on pallets

- 4 hives to pallet
- Moved with bobcats



Citrus in Central Valley and Manzanita in foothills

- Feb-mid March



Cherries, Apples and making splits

- Late March through April
- Upper valley Stockton and Lodi



Northeast to Eagle Bend

- Mid April to very early May
- Try to make the Dandelion bloom (first wk of May)
- Build up on pollen and nectar from Dandelion



Main nectar flow

- Late May through July
- Basswood and White Sweet Clover



Basswood or Linden



White Sweet Clover

Honey removal and extraction

Mid July to early September



Memories of migratory beekeeping

- 1. Very long hours of driving no legal restrictions
- 2. No stopping except for gas when loaded
- 3. Peanut butter and Pinto bean sandwiches
- 4. Screened bees had to be watered at stops
- 5. Brief sleep before unloading—long sleep after
- 6. BIG meals at truck stops when trucks did not have bees on them

Impressions of states

- Nebraska---must produce lots of hay



Kansas—Fence posts made of cut stone slabs



State impressions

- Oklahoma---Native American pride



Texas---Very big and lots of Jackrabbits



Greatest experience in migratory
beekeeping

- Three unpredictable
days in Texas with
- Beulah

