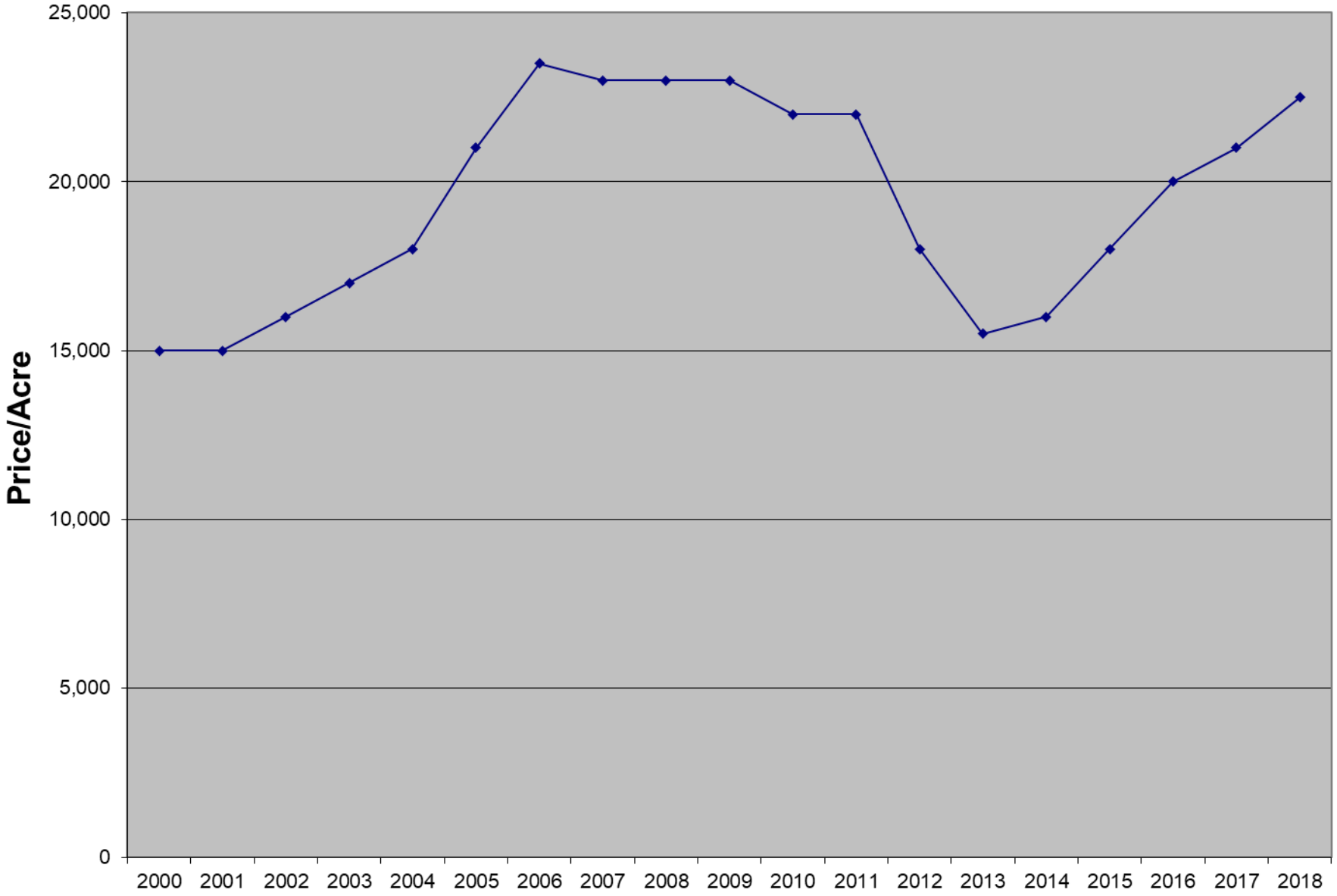
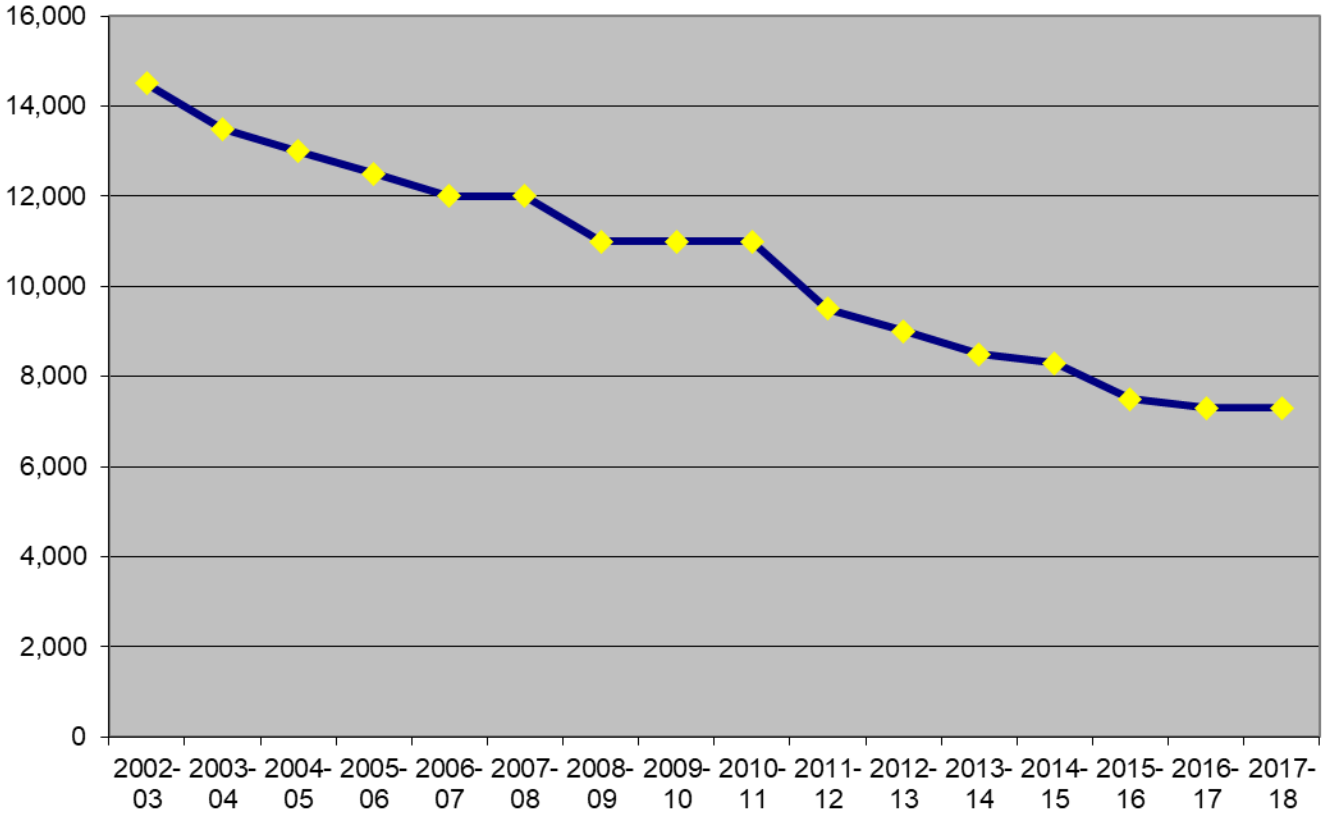
Arizona Citrus Trends

Scott Halver, ARA, MAI
Ganado Group, Inc.

Yuma Mesa


Price/Acre
25,000
20,000
15,000
10,000
5,000
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018

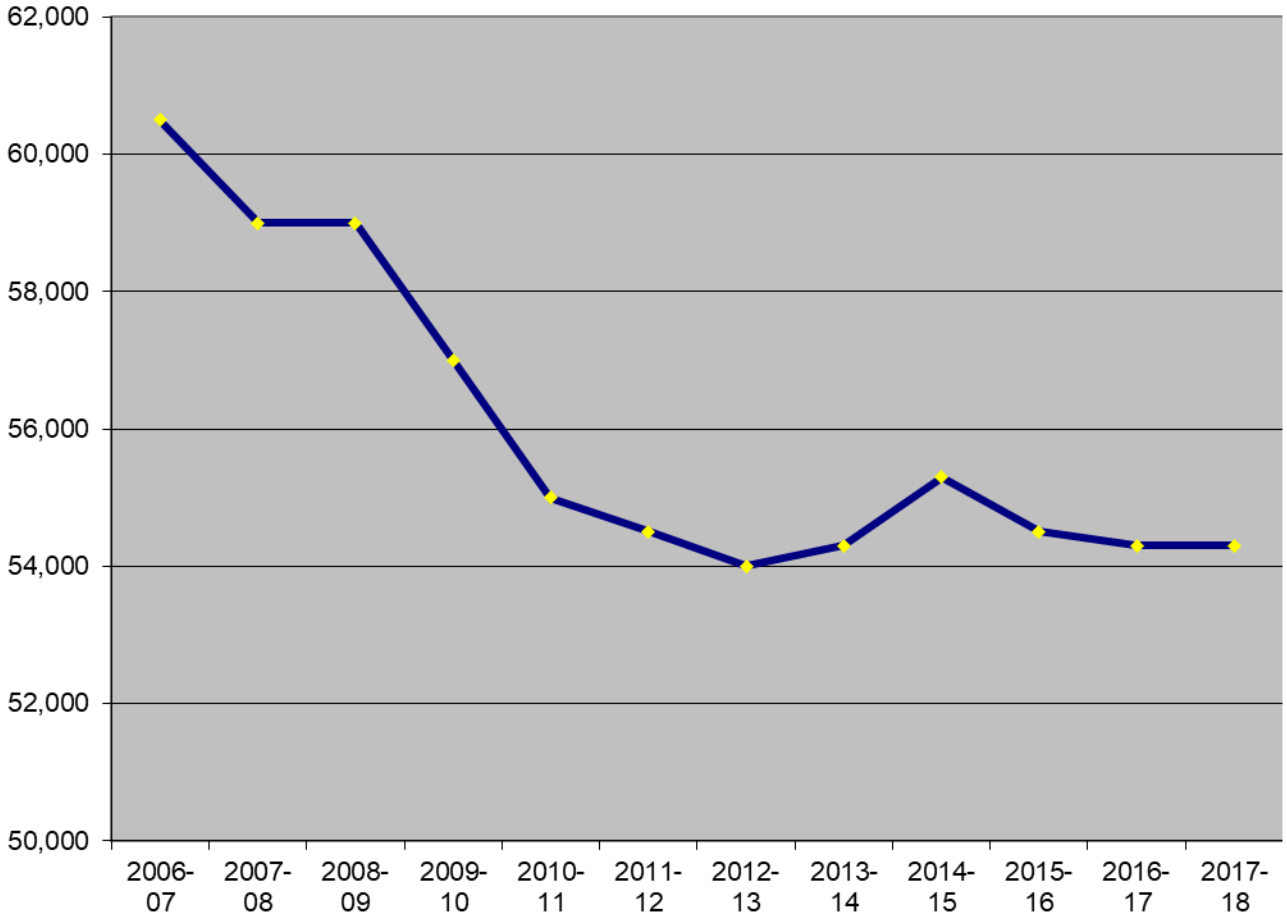
Lemon Acreage - Arizona



Year	Acres
1994-95	16,100
2000-01	14,800
2001-02	14,800
2002-03	14,500
2003-04	13,500
2004-05	13,000
2005-06	12,500
2006-07	12,000
2007-08	12,000
2008-09	11,000
2009-10	11,000
2010-11	11,000
2011-12	9,500
2012-13	9,000
2013-14	8,500
2014-15	8,300
2015-16	7,500
2016-17	7,300
2017-18	7,300

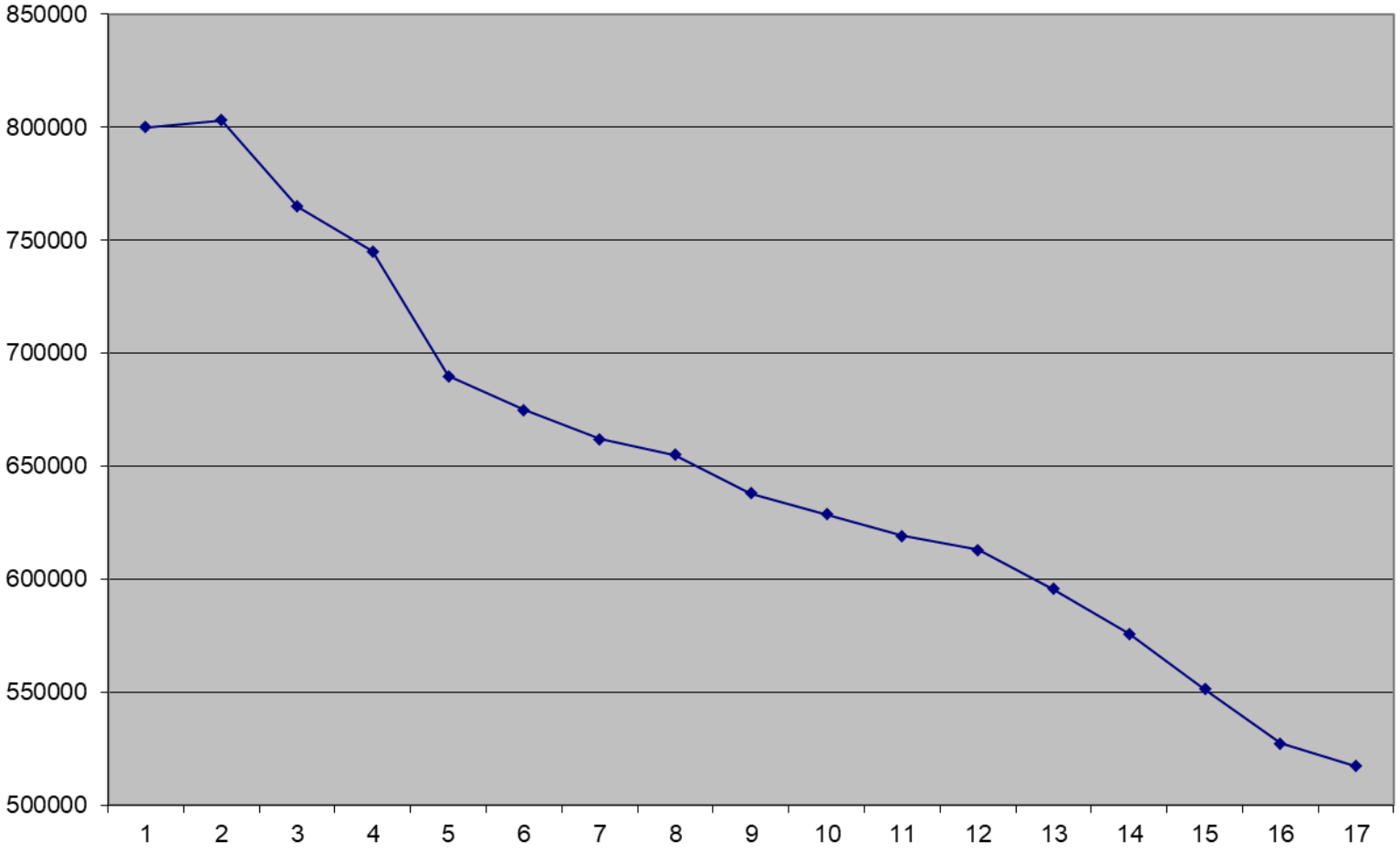
USDA and Arizona Agricultural Statistics

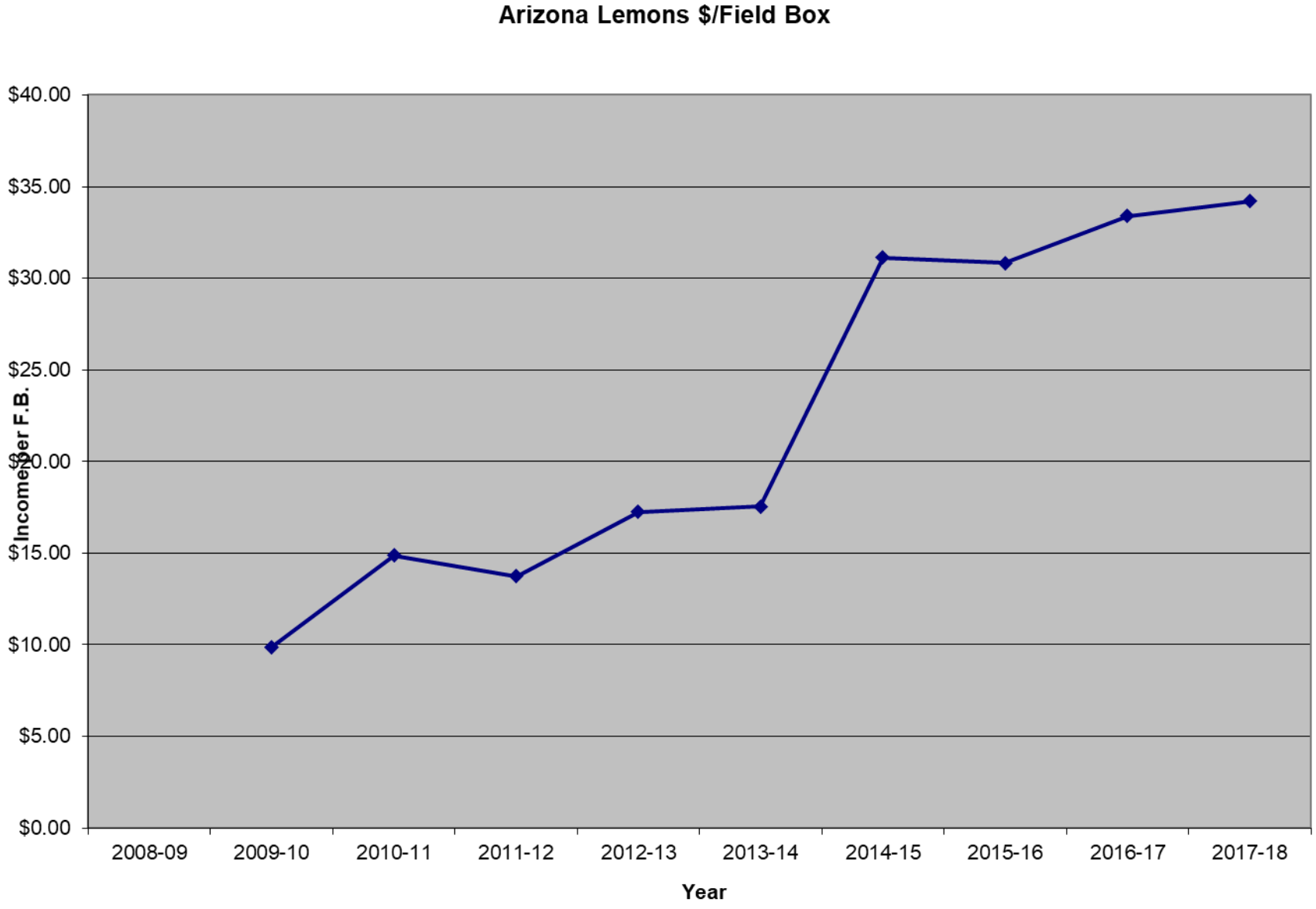
Lemon Acreage – United States



Year	Acres
2006-07	60,500
2007-08	59,000
2008-09	59,000
2009-10	57,000
2010-11	55,000
2011-12	54,500
2012-13	54,000
2013-14	54,300
2014-15	55,300
2015-16	54,500
2016-17	54,300
2017-18	54,300

Bearing Acres of Oranges – United States




Arizona Lemons $/Field Box
$40.00
$35.00
$30.00
$25.00
$20.00
$15.00
$10.00
$5.00
$0.00
Income per F.B.
2008-09
2009-10
2010-11
2011-12
2012-13
2013-14
2014-15
2015-16
2016-17
2017-18
Year

CITRUS OUTLOOK '18 – '19

A couple of new citrus sales have occurred over the past 2-3 years in the Yuma-El Centro area. Grove values have been maintaining or edging upward. One sale occurred for $3.6 million in 2016, up 5% from its prior sale in 2014 at $3.2 million, same citrus planting just 2 years older. Commodity prices have been very good for lemons and decent for Minneolas. Total plantings of lemons is down (7,300 acres for Arizona, 2017-18) significantly from say 10-15 years ago (14,000+ acres) but a lot of new plantings of lemons has occurred and are probably not reflected in the USDA acreage numbers yet. Yields were back to normal this year with the better lemon groves yielding from 350 to 400 field boxes (best groves 500 field boxes) with growers receiving from $15 to $20 per field box and/or a net return of something like $5,000 per acre (desert region). The 2018 Minneola harvest is just getting under way with a moderate crop yield expected. Minneaolas have been profitable the past several years but not as lucrative as lemons- expecting $7 - $8 per field box.

A significant amount of Medjool dates are being planted in the Yuma area- approaching 10,000 acres. Prices have been good for Medjool dates, but the future supply is increasing significantly.

The Asian Citrus Psyllid or Citrus Greening Disease is the newest to impact the citrus industry. A quarantine was put on by USDA for most of the citrus growing areas of the State of Arizona in late 2015. Citrus Greening was first found in Florida in 1998. No infected groves have been found in Arizona to date. The insect carrying the disease, citrus psyllid has been found but not the disease. The disease is characterized by blotchy mottle on the leaves, alters the fruit taste, and in some cases the fruit tends to "green back-up" after partially maturing/coloring. The disease is transmitted by the Psyllid and/or by grafting infected trees. Fruit intended to leave the State of Arizona must be washed. In talking with area packing houses the washing of fruit was already being done and as such it does not change business practices too much. The most recent development is the possible "tarping of loads", citrus being transported in bulk from the southern areas to the northern area packing houses. The true extent (cost) of this measure is generally unknown.

Since the mid 1990's a significant amount of acreage has been removed in District III (desert- Yuma, Phoenix, & Coachella Valley), partly because of disease but also because of aging groves and urbanization. "Macrophylla Decline" and "Coniopohera" are being named as the cause of accelerating the decline in older lemons (Antrodia, other variety). Macrophylla Decline is described as an incompatibility between Macrophylla rootstock and the bud-particularly Frost New Cellar (Frost New Cellar budded to the rootstock/Macrophylla). Other varieties of lemons do not seem to have experienced the "decline" (tree declines at say 27 yrs of age while others go to say 35 years). Coniopohera is a wind-borne disease. If caught in time, Coniopohera can be minimized.

Marketing: The Trump administration proposed a tariff on Mexican citrus fruit brought into the U.S but the ban has not been implemented. The ban would benefit U.S. citrus growers. The Obama administration was in-the-process of lifting a 20 year ban on citrus from Argentina and the ban was lifted in 2017. The ban was in-place because of disease problems including Black Spot (Guignardia Citricarpa) a fungus that leaves spots on the fruit and leaves. The fruit entered the U.S. for the first time this past year. Argentina fruit comes off at the same time as District II or Ventura-Oxnard but with California's drought problems the economic impact was not significant.

Yuma – I.V. Calif	Value Per Acre	Activity Trend	Rent Range	Activity Trend
Young Groves 1-5 Yrs.	$8,000 - $12,000		Limited/Stable	Seldom Rented Stable
Mid-life 6-15 Yrs.	$17,000 - $22,000		Limited/Stable	Seldom Rented Stable
Late-life 16-30 Yrs.	$12,000 - $16,000		Moderate/Stable	Seldom Rented Stable

Note: The $8,000/ac for 1 year old lemons is the underlying land unless located farther out, El Centro area.

Yuma Mesa Irrigation and Drainage District, $85.00 acre for nine acre feet, additional $6.00/ac ft (paying $750/ac for idling selected acreage- water sale).
Unit B, $163.68 for 10 acre feet (west side of mesa)
YCWUA, $106.50 5 acre feet (Yuma Valley)
North Gila Valley Irrigation & Drainage District, $65 for 5 ac feet
Bard Water District, $97.00, 5 or 8 ac ft depending on soils-loam or sandy, additional $19.40/acre foot

Written as of 12-3-18 by Scott Halver, ARA, MAI @ Ganado Group, Inc.