NCSBA North Carolina State Beekeepers Association

How to Buy or Sell Bees in NC

For Buyers:

For a list dealers have been approved to sell bees in North Carolina and are permitted to sell or ship bees:

http://www.ncagr.gov/plantindustry/Plant/apiary/index.htm

There are links at the bottom of the page.

For Sellers:

Parties interested in selling honey bees in the State of North Carolina must submit the following forms to N.C. Department of Agriculture and Consumer Services:

1. A current health Certificate from state of origin.
2. Application form for Permit to Sell Bees in North Carolina.
3. A non-refundable $25.00 Permit Fee must accompany the above application.
4. Compliance agreement for producers who wish to sell queens or packaged bees in North Carolina. Be sure to provide the requested information. The forms must be signed and dated.

All forms must be typed or printed legibly. Unsigned forms cannot be processed.

Upon receipt of the appropriate forms, your application will be considered.

It is unlawful to market queens, packages, nucs, or hives before the Permit to Sell Bees in North Carolina has been issued.

For North Carolina residents, a permit is not required for (1) the sale of less than 10 bee hives in a calendar year, (2) at one time going -out-of-business sale of less than 50 beehives, or (3) the renting of bees for pollination purposes or the movement of bees to gather honey.

If you would like to request forms or if you have questions regarding this procedure, please visit the website at:

http://www.ncagr.gov/plantindustry/Plant/apiary/index.htm or contact Don Hopkins at (336) 376-8250 or Don.Hopkins@ncagr.gov.

NCDA&CS
BENEFICIAL INSECT LAB
1060 MAIL SERVICE CENTER
RALEIGH, NC 27699

2017 Permits to Sell Bees

The following dealers have been approved to sell bees in North Carolina and are permitted to sell or ship bees of the said apiary.

In State Companies Permitted to Sell Bees

The inspectors' report forms for these apiaries are public records and are on file at the Beneficial Insect Lab, 950 East Chatham Street, Cary, NC 27511, (919) 233-8214.

Company Name	Address	City	State	Zip Code	Status	Spring Inspection	Phone Number
1 SweetWings Honey Bee Farm	2014 Coddle Creek Hwy	Mooresville	NC	28115	Active	+	(704) 904-6725
7 Stands Bee Farm	1885 Middle Fork Rd	Hays	NC	28635			(336) 957-4744 / (336) 984-7768
Alan Cannady	411 Main Street	Newton Grove	NC	28366	Active	+	(910) 594-0193
Albemarle Bee Co.	32586 B Austin Rd.	New London	NC	28127	Active		(704) 463-1233
B & Z Bee Farm	12 Indian Ln	Weaverville	NC	28787			(828) 231-6211
Bailey Bee Supply	147 Boone Square St.	Hillsborough	NC	27278	Active		(919) 241-4236
Bee Sweet Bee Farm, LLC	503 Peach Street	Shelby	NC	28150	Active	+	(704) 487-7731
Beech Mountain	2775 Beech Mountain Road	Elk Park	NC	28622	Active		(828) 733-4525
Beez Needz	3662 Edgar Rd.	Sophia	NC	27350	Active		(336) 431-2339
Betseys Bees	1226 Mt. Olivet Church Rd.	Franklinton	NC	27525	Active		(919) 495-1450
Bill Boyd	5803 Old Monroe Rd.	Indian Trail	NC	28079	Active		(704) 821-7310
Billy Searcy	310 Rubin Wilson Rd.	Mill Spring	NC	28756	Active	+	(828) 817-0266
Blanton Apiaries	1844 Back Creek Ct	Asheboro	NC	27205	Active	+	(336) 465-1719
Bob Doty	6325 Stirewalt Rd.	Kannapolis	NC	28081	Active		(704) 934-2640
Brother Allen Apiary	1399 Lake Logan Rd	Canton	NC	28716			(828) 400-1735
Brushy Mountain Bee Farm	610 Bethany Church Rd	Moravian Falls	NC	28654	Active	+	(336) 258-4110
Bryan Fisher	712 Deaton St	Kannapolis	NC	28081	Active		(980) 521-8642
Chad Williamson	839 Tot Dellinger Rd	Cherryville	NC	28021			(704) 530-7489
Charles B Fleming	1214 Clark Rd	Lillington	NC	27546	Active	+	(910) 814-0486
Charles Dean Trull Jr	1428 Trull Place	Monroe	NC	28110	Active	+	(704) 201-3520
Charles Revis	921 East Court St	Marion	NC	28752			(828) 925-1430
Chris Mendenhall	5703 Midway School Rd	Thomasville	NC	27360			(336) 442-9835
Clint Brooks	25607 Rowland Rd	Locust	NC	28097	Active	+	(980) 333-5841
Curtis M. Wooten	7429 Old Maple Hill Rd	Burgaw	NC	28425	Active		(910) 540-4611
Dandelion Bee Supply Inc.	737 Irish Potato Rd.	Concord	NC	28025	Active	+	(704) 784-0101
Danny H. Lashus	556 Stephens Road	Providence	NC	27315	Active		(434) 710-4344 / (434) 770-8102
David Bridgers	118 Wellington Dr	Wilmington	NC	28411	Active		(910) 686-1947
David Fruchtenicht	2927 Chapel Hill Rd	Durham	NC	27707	Active		(919) 489-0428

David Link	157 Crepe Myrtle Circle	Winston Salem	NC	27106	Active		(336) 251-3427
David Stallings	1121 Erkwood Hts.	Hendersonville	NC	28739	Active	+	(828) 606-9592
Donnie Smith	599 John Russell Rd.	Raeford	NC	28376			(910) 875-5640
Dyson Apiaries	468 Dyson Rd.	Mocksville	NC	27028	Active		(336) 492-6408
Earpsboro Bees	1725 Earpsboro Rd.	Zebulon	NC	27597			(919) 453-8440 / (919) 404-1441
Eddie G Hicks	2571 Howard Austin Rd	Granite Falls	NC	28630	Active	+	(828) 896-7764
Eric Nelon	1959 NC 108 Hwy E	Columbus	NC	28722	Active	+	(828) 779-0685
Eurofins Agroscience Services, Inc.	8909 Atkins Rd.	Mebane	NC	27302	Active	+	(336) 269-6517
Faith Apiary	792 Hamlin Ford Rd	Dobson	NC	27017	Active	+	(336) 320-8363
Frank Wyatt	P.O. Box 4563	Eden	NC	27289	Active	+	(336) 616-7044
Garry Whitley	36824 Melton Rd.	Albemarle	NC	28001	Active	+	(704) 982-0698
George Page	2686 Piney Grove Rd.	Kernersville	NC	27284			(336) 497-4310
Gerry and Libby Mack	121 Hermitage Rd	Charlotte	NC	28207	Active		(704) 953-0565
Gommin Inc	1945 Davis Mtn Rd.	Hendersonville	NC	28739	Active	+	(828) 693-1966
Green Acres Apiary	9152 Bay Trace Drive	Linden	NC	28356	Active	+	(910) 364-5286
Half Moon Honey	4179 Gum Branch Road	Jacksonville	NC	28540	Active	+	(910) 346-8281
Harris Apiaries	10055 Hwy 53 West	White Oak	NC	28399	Active	+	(910) 988-6227
Hendley's Farm	1476 Roby Conley Rd	Marion	NC	28752			(828) 460-0292
Hidden Happiness Bee Farm	1106 Chestnut Mtn Rd	Deep Gap	NC	28618	Active	+	(336) 957-0275
Holbert Bee Supply	P.O. Box 217	Saluda	NC	28773	Active	+	(828) 749-2337
Holt's Apiaries LLC	132 Holt's Ln	Siloam	NC	27047	Active	+	(336) 710-4904
Jeff Ritchie	3901 Piney RD	Morganton	NC	28655			(828) 438-1720
Jeffrey C. Hinson	16331 Philadelphia Church Rd.	Oakboro	NC	28129	Active	+	(704) 438-8760
Jeffry V. Cox	3117 Tyrus Rd.	Eastover	NC	28312	Active	+	(910) 578-4949
Jeremy Tyson	742 Eagle Falls Rd.	Madison	NC	27025	Active		(336) 453-1281
Joey Lee Bullin	2633 Woodruff Rd.	Boonville	NC	27011	Active	+	(336) 244-1415
John Caudle Apiaries / Herbs Bees LLC	1029 Sewickley Drive	Charlotte	NC	28209			(704) 763-1646
John Christie	224 Firefly Hill Rd.	Marshall	NC	28753	Active		(828) 231-6973
Johnathan Lutz	2112 Ashwood St.	Maiden	NC	28650	Active	+	(828)428-3744
Johnny's Honey Bee Farm & Supplies	6500 Little Satterwhite Rd	Oxford	NC	27565			(919) 482-5071
Just Bee Cool Apiary	1011 Napa Place	Apex	NC	27502			(919) 740-5134
Kathy Webb	308 Webb Farm Rd	Salisbury	NC	28147	Active		(704) 213-3179
Kenneth Edgar	4725 Carya Drive	Wilmington	NC	28412			(910) 367-1896
KTs Orchard & Apiary	195 Pigeon Ford Rd.	Canton	NC	28716			(828) 279-5614
Kyle Sanborn	7500 Pine Ridge Road	Faison	NC	28341	Active	+	(252) 917-3828
Larry R. Cox	1506 Old Quarry Rd.	Sparta	NC	28675	Active		(336) 467-4340
Lee's Bees	1818 Saddle Club Rd	Mebane	NC	27302	Active	+	(919) 949-6140
Lick Log Branch Apiaries	111 Log Gap Rd	Fairview	NC	28730			(828) 275-2225
Lott Farm and Apiary	56 Sparrow Dr	Waynesville	NC	28786	Active		(828) 646-3399
Mark S. Houser	771 Whiteside Rd	Rutherfordton	NC	28139			(828) 447-5944
Mark Smith	103 Sprucewood Circle	Locust	NC	28097	Active	+	(704) 787-2501
Mary Skelton	166 Azalea Dr.	Waynesville	NC	28786	Active	+	(828) 550-5763
McCoy Feed & Farm Supply Inc	4420 Hwy 24-27 East	Midland	NC	28107	Active		(704) 888-2298
Mike Bourn	1104 Arbor Drive	China Grove	NC	28023	Active		(704) 506-5390
Mike Josey	7090 Wishing Well Rd	Pfafftown	NC	27040	Active	+	(336) 407-1553

Miller Bee Supply, Inc.	496 Yellow Banks Rd.	North Wilkesboro	NC	28659	Active	+	(336) 670-2249
Mountain Valley Apiaries	212 Mt Top Rd.	Thurmond	NC	28683	Active		(336) 874-2260
Nadeau Farms Inc	538 Gum Bridge Rd	Elizabeth City	NC	27909	Active	+	(252) 619-7308
Old Dutch Farm Apiary	3336 Startown Rd	Newton	NC	28658	Active		(828) 855-6942
Orr Bee Supply	323 Morris Hollow Rd.	Old Fort	NC	28762	Active	+	(828) 581-4494
Penny Apiaries	501 Penny Rd.	Beulaville	NC	28518	Active	+	(910) 290-2663 / (910) 290-4186
Phillip Haines	12560 Appin Rd	Laurinburg	NC	28352	Active	+	(910) 217-5832
Plank Road Apiary	3350 S. Plank Rd	Sanford	NC	27330			(919) 776-9517
Queen Bee Honey Farm LLC	119 Terry Springs Ln	Statesville	NC	28677	Active		(704) 682-4018
Rabbit Creek Bee Company, LLC	260 Corbin Cove Dr.	Franklin	NC	28734			(828) 634-1233
Ralph Harlan	1295 Brevard Place Road	Iron Station	NC	28080	Active		(704) 807-6207
Rayon Locklear	2883 S. Duffie Rd	Red Spring	NC	28377	Active	+	(910) 843-5561
Rev. Earl Jones Bee Farm	175 Folks Drive	Red Springs	NC	28377	Active	+	(910) 734-9337
Revis Russian Apiaries	P.O. Box 2520	Marion	NC	28752	Active		(828) 652-3524
Rick Williams	1207 Maple Ridge Road	Wilmington	NC	28411	Active		(910) 231-1755
Robert E. Baucom	2518 Hamilton X Rd	Marshville	NC	28103	Active		(704) 624-5116
Robert M. Dennis	1040 High Meadows Drive	Concord	NC	28025			(704) 721-5630
Robert Smith	5204 NC Hwy 127 South	Hickory	NC	28602	Active	+	(828) 261-5210
Rocking Bee Farms LLC.	368 New Hope Ch. Rd	Star	NC	27356			(704) 453-1131
Roger Walker	13965 US 64 ALT. Hwy West	Rocky Mount	NC	27801	Active	+	(252) 442-4065
Sapony Creek Apiaries	6154 West Mount Drive	Rocky Mount	NC	27803	Active		(252) 904-1446
Silk Hope Apiaries	1642 Henderson Tanyard Rd.	Pittsboro	NC	27312	Active		(919) 542-3157
Silver Spoon Apiaries	P.O. Box 4486	Wilmington	NC	28406			(910) 352-7868
Smaranda Cristea	P.O. Box 1618	Jacksonville	NC	28546	Active	+	(910) 358-2672
Spring Bank Bee Farm, Inc.	298 Spring Bank Road	Goldsboro	NC	27534			(919) 738-7638
Squeaky Tree Honey Farm	1417 Alexander St.	Statesville	NC	28677	Active	+	(704) 450-7335
Sweet Betsy Farm	3947 Mudcut Road	Marion	NC	28752	Active		(828) 724-4444
Tates Apiaries	2241 Union Cross Rd.	Winston-Salem	NC	27107			(336) 788-4554 / (336) 970-3952
Taylor-Rodgers LLC	213 Martin Farm Lane	Knotts Island	NC	27950	Active	+	(203) 803-5262
Terry Weaver	237 N. Trent Rd.	Merritt	NC	28556	Active		(252) 249-6170
Thomas "Kenneth" Medlin	91 Daisy Lane	Hurdle Mills	NC	27541			(336) 364-1915
Timothy A. Frye	PO Box 761	Liberty	NC	27298	Active	+	(336) 549-7358
TJ's Bees	630 Waddell Rd	Roaring River	NC	28669			(336) 957-4285 / (336) 262 2406
Tony Parker	15913 Sam Potts Hwy.	Bolton	NC	28423			(910) 655-0741 / (910) 386-7725
Triad Bee Supply LLC	4062 Evergreen Dr.	Trinity	NC	27370	Active		(336) 475-5137
Triple J Farms	595 Duke Whittaker Rd	Mocksville	NC	27028	Active		(336) 492-7564
Vince Applebee	24300 N.C. Hwy 8	Denton	NC	27239	Active	+	(336) 859-3895 / (336) 250-9582
Wagner Brother's Apiaries	624 Erwin Rd	Sanford	NC	27330	Active	+	(919) 478-6222
Wagram Apiary	24560 McGill St.	Wagram	NC	28396	Active	+	(910) 318-1202
Wayne D Medlin	3122 Lanesboro Rd	Marshville	NC	28103	Active	+	(704) 774-5355
Wayne Hansen	8004 Southway Rd	Charlotte	NC	28215	Active		(704) 536-4805 / (704) 287-4805
Wild Mountain Bees LLC	23 Merrimon Ave	Weaverville	NC	28787	Active		(828) 242-3906
William Fricks	2020 Jo Mac Rd	Chapel Hill	NC	27516	Active		
William Trivette	10500 McFarland Rd	Laurel Hill	NC	28351			(910) 610-3369
Zachary Lamas	8743 Allison Road	Cedar Grove	NC	27278			(603) 748-8334

Out of State Companies Permitted to Sell Bees

Company Name	Address	City	State	Zip Code	Status	Health Certification	Phone Number
Back Forty Bees	304 Back Forty Loop	Williamsburg	VA	23188	Active	+	(757) 745-9081
Blue Ridge Honey Co.	P.O. Box 15	Lakemont	GA	30552	Active	+	(706) 782-6722
Bordelon Apiaries, LLC	283 Palmer Ridge Rd	Plaucheville	LA	71362	Active	+	(337) 988-6644
Carolina Bee Supply LLC	10 S. Main St	Travelers Rest	SC	29690	Active	+	(864) 610-2337
Gardner's Apiaries / Spell Bee LLC	510 Patterson Rd	Baxley	GA	31513	Active	+	(912) 367-9352
Hardeman Apiaries	P.O. Box 214	Mt. Vernon	GA	30445	Active	+	(912) 583-2710
Jarrett Apiaries	1903 Hwy. 198	Baldwin	GA	30511	Active	+	(706) 677-2854
JJ's Honey	5748 Chancey Rd	Patterson	GA	31557			(912) 647-3726
Kelley Beekeeping Co	807 W. Main St	Clarkson	KY	42726	Active	+	(270) 242-6019
Kona Queen Hawaii	P.O. Box 768	Captain Cook	HI	96704	Active	+	(808) 328-9016
Kutik's Honey Farm LLC	1204 Holladay Rd	Manning	SC	29102	Active	+	(607) 336-4105
M&N Apiary, LLC	264 Tillman Anderson Rd	Jesup	GA	31545	Active	+	(912) 294-6123
Norray's Honey Inc	741 Pleasant Valley RD	Berne	NY	12023	Active	+	(518) 872-2257
Roberts Bee Company	2700 S. Macon St. Ext.	Jesup	GA	31545	Active	+	(912) 427-7311
Rossman Apiaries Inc	3364-A GA Hwy 33 N	Moultrie	GA	31768	Active	+	(229) 985-7200
Rufer's Deep East Texas Queens LLC	PO Box 394	Milam	TX	75959	Active	+	(612) 325-1203
Strachan Apiaries Inc.	2522 Tierra Buena Rd.	Yuba City	CA	95993	Active		(530) 674-3881
Virginia Eastern Shore Apiaries	23340 Roseland Drive	Accomac	VA	23301	Active	+	(757) 710-5684
VP Queen Bees	P.O. Box 99	Iva	SC	29655	Active	+	(864) 348-3026

It is unlawful to sell queens, packages, nucs or hives before the Permit to Sell Bees in North Carolina has been issued. For North Carolina residents, a permit is not required for: (1) the sales of less than 10 bee hives in a calendar year; (2) a one time going out-of-business sales for less than 50 bee hives, or (3) the renting of bees for pollination purposes or the movement of bees to gather honey.

Information or application forms for the Permit to Sell Bees in North Carolina are available by writing: Attn: Tammy Morgan, NCDA&CS, 1060 Mail Service Center, Raleigh, NC 27699, calling (919) 233-8214, or contacting your local county extension office.

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Selection of Location

The first decision the new beekeeper must make is where to put the hive. There are different factors that make a beehive location successful. There are also other questions about location to consider. For one thing, try to choose a location that is as close to your home as possible. There are several reasons for this. The closer the hive is to your house, the more convenient your storage area will be and the less time you'll spend traveling to and from your hive. If they are nearby, you will be able to inspect them more often.

Occasionally, beehives are vandalized by thoughtless people who find a beehive in an isolated area an irresistible target for rock throwing or shotgun blasts. Therefore, having the beehive closer to your home or the home of some other responsible person provides greater security for the colony.

Nectar
You need to make a careful study of available honey plants around a potential hive location. Honey bees get most of their nectar and pollen within a half-mile radius of their hive location. However, they can travel from one to two miles on their collection trips, depending upon the ruggedness of the terrain and the prevailing winds.

Water
Bees, like all animals, need a constant supply of water. It is best if there is a stream or pond in the vicinity of the beehive. A good source of water is especially necessary if your beehive is to be located close to neighbors' homes. Otherwise, the bees may choose your neighbor's water faucet, the children's wading pool, or the bird bath for a source of water. To avoid having your bees become a nuisance, place a tub or pan of water near the hive, and your bees will learn to go only to that safe "watering hole." Make certain that the water source has something in it the bees can land on without danger of drowning, such as cork floats, bark, or layers of crushed rock.

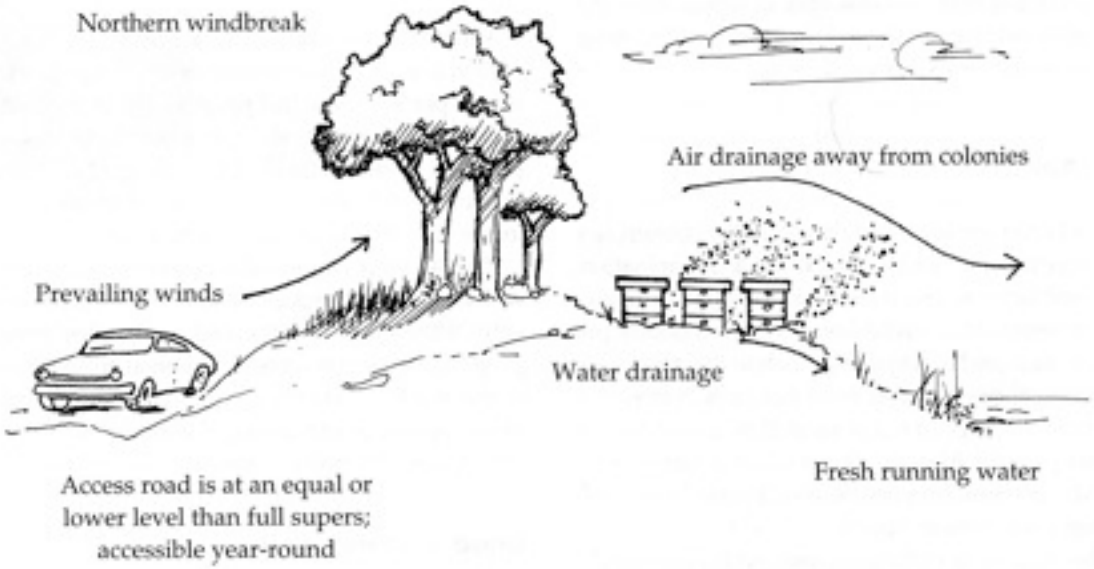
Drainage
There must be some water near the hive, but not too much. There should never be any possibility of the hive having to sit in water. Therefore, look for a spot with good drainage. Keep the hive off the ground using a hive stand or bricks and tilt it slightly forward. This will permit any moisture that may accumulate to run out the front entrance. Leaning the hive slightly forward also makes it easier for the bees to remove dead bees and other waste materials.

Sunlight
When locating your bees, also consider available sunlight. Your hives should have as much sunlight as possible, especially during the winter months. Face your hive toward the south, where the entrance will have the greatest exposure to sunlight and will be protected from the cold north winds of winter. If your location makes it inconvenient to place the hives facing south, try facing them east to catch the morning sun.

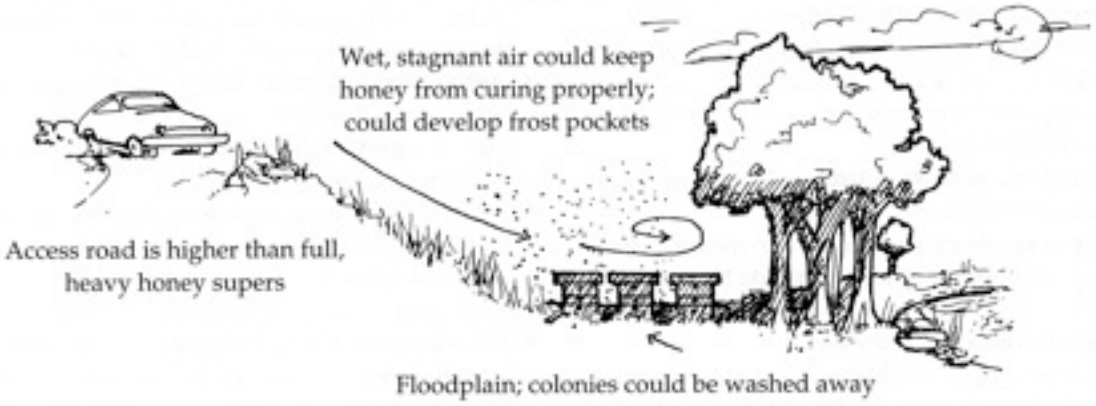
Vegetation
Finally, think about the vegetation immediately around your hive location. Trees to the west or north provide valuable protection from winter winds. You will want to keep the grass and weeds cut around your hive. This will reduce any danger of fire damage and provide good ventilation, which is necessary for the bees to maintain the proper hive temperature.

source: Purdue Extension publication 4-H-586-W

Ideal Apiary Site



Poor Apiary Site



Drawing by J. Propst; labeling ©1997 D.Sammataro

You like potato and I like potahto
You like tomato and I like tomahto
Potato, potahto, tomato, tomahto
Let's call the whole thing off

-- George & Ira Gershwin, "Let's Call the Whole Thing Off"

Beekeepers love to fight about things. Should we use screened or solid bottom boards? Reverse hive bodies or not? 8-frame or 10-frame equipment? Shallows, mediums or deeps? If we "win" the argument or find others who agree with us, it validates our primal need for self-worth. (A fascinating book on this topic is How We Know What Isn't So by Thomas Gilovich.)

But let me share a secret: In beekeeping, very few things are critically important. Almost every piece of equipment we use or method we employ is for the purpose of making things easier for the beekeeper, not the bees. Honey bees are very robust creatures, able to live on every habitable continent under widely diverse conditions. For the most part, they don't care one way or the other about what we do or how we do it. I've heard it said that "it all works," and that is, in general, true.

The corollary to this theorem is that beekeepers often agonize over the wrong things. "Woe is me… my sugar syrup is too thick for this time of year so my bees are going to suffer!" "Oh no! My hives are pointed northwest instead of southeast! How can I ever forgive myself?" "I've been using 'pine needles' instead of 'pine straw' in my smoker… I'm so embarrassed!"

One of the many decisions that new beekeepers have to make, and one that they'll get tons of spirited opinions on, is whether to start with packages, nucs or complete hives. Of course the dream way to start is with captured swarms, but that is extremely hit or miss and cannot be relied upon (see Free Bees? [December 2014]). The saying, "A bird in the hand is worth two in the bush" is appropriate here in a very literal sense. So although Hilda Ransome tells us in The Sacred Bee that,


FOR SALE

YOUNG ITALIAN BEES

½ lb., $1.25; 1 lb., $2.00; 2 lbs., $3.75; 3 lbs., $4.50. Untested Queen, $1.00; Tested, $2.00. Nuclei, $1.25 per frame. No disease. Also Apiaries of from 50 to 500 colonies.

Would like to correspond with anyone desiring location in fine, sweet clover belt, where the queen-rearing business or shipping bees by the pound can be carried on under ideal conditions. Always have big swarms issue by April 1.

Stover Apiaries,
Mayhew, Miss.

A classified ad from the April 1913 issue of American Bee Journal offered packages, nucs and even entire apiaries! For price comparison, in 1913 sirloin steak was 25 cents per pound, a dozen eggs were 35 cents and a gallon of milk cost 36 cents.

according to Eastern European folklore, it is bad luck to buy bees, beginning beekeepers are wise to do it anyway. Once a hobby beekeeper is up and running with a successful year or two under her/his belt, under normal circumstances it shouldn't be necessary to ever buy bees again (except perhaps queens).

The reason that packages, nucs and complete hives are all legitimate and popular options for starting up is that they each have their own advantages and disadvantages. Ultimately the choice should depend on the buyer's goals, experience set, risk assessment and finances.

Complete hives

Starting with complete hives is the same as moving an existing hive. How complete "complete" is will depend on the seller, but it should include a full-sized colony of bees with a laying queen, lots of brood and fully drawn comb. It may include a full complement of basic equipment (bottom board, brood box, frames

with drawn comb, inner cover, outer cover).

Advantages

1. No build-up time required.
2. Should be robust with respect to surviving the first summer dearth and preparing for winter.
3. If purchased early enough, could easily produce a surplus honey crop.

Disadvantages

1. This is the most expensive option on a total-dollar basis, although it may be a bargain on a per-bee basis.
2. Complete hives for sale are not easy to find locally -- they are a rather uncommon commodity, not available in large numbers. (Check the NC Agricultural Review classified ads for offers.)
3. They cannot be shipped – on-site pick-up only, wherever that may be.
4. "Complete" means that the hive comes complete with any well-established diseases and pests.
5. Buyer beware: Buying a used car involves careful inspection and questioning before the purchase; buying used bees should be no different. Just like used cars, they can be sold by very ethical professionals, ignorant amateurs, lying cheaters and every combination thereof.
6. The purchaser is starting out full-bore with a large colony, not easing into beekeeping toe-first. Large, established colonies sting a lot more, eat a lot more and require more skill to inspect than small "starter" colonies.

Nucleus colonies

A nucleus colony, or "nuc" for short, is like a "nuclear family": it has a home (albeit small), a laying queen, a proportionate number of worker bees, a nice amount of brood (e.g. a couple of frames' worth) and enough food stores to suffice as the colony becomes established.

If full colonies are like "adults", nucs are like "teenagers". They are well on their way to "adulthood" but still have a lot of maturing to do.

Most nucs consist of five deep frames of drawn comb which contain a mix of honey, pollen, brood and empty cells. The ratio of brood to stores and empty comb is not standardized and should be discussed with the seller before purchase. Apiculture author Larry Connor says, "I like to prepare a five-frame nucleus colony with two or three frames of brood, plus two food frames, and an empty drawn comb so the bees will emerge and swell the number of bees in the nucleus."[1]

Sometimes nucs are sold "with frame exchange", which means the buyer gives the seller five new frames, fully assembled with foundation, to replace the five that are included in the nuc. The buyer should expect a discounted price that reflects the cost of the frames with foundation ($2 to $3 each). It seems more common for experienced beekeepers to sell nucs "without exchange" because the quality of frames they may receive in trade is highly variable. For the buyer, "without exchange" is a lot easier and no more expensive overall.

Nucs will either be sold in cardboard nuc boxes or the seller will transfer five frames directly into the buyer's equipment. Note that wooden nuc-sized equipment can be purchased to hold five-frame colonies, but these have absolutely nothing to do with a brand new beekeeper buying a nuc. A first-time beekeeper should put the nuc frames into full-sized equipment since the goal is to have the colony expand as rapidly as possible. I have spoken to novices who mistakenly think that they are supposed to start with nuc-sized equipment and then step up as the colony grows; that approach is completely misguided. Nuc-sized hives are a great tool for many tasks (for example, see May 2016, Making Splits Without Bananas) but they don't directly complement our goal of growing full-sized colonies.

[1] Lawrence John Connor, "Making and Maintaining Connections" in American Bee Journal, vol. 156 no. 11 (November 2016), p. 1256.

This cardboard nuc box has been opened to aid ventilation and allow the bees to make cleansing flights.

Another critical point about nucs is that they must be given adequate ventilation during transport. A good nuc will have a lot of bees confined in a small space, probably with only a small air vent or two. If the nuc is transported in the back of a hot station wagon and left for an hour or so while the owner runs into WalMart, the bees will all be dead from heat exhaustion and suffocation when the owner returns. Beekeeper Steve Andrijiw advises that we should treat nucs and packages as we would a baby. If we leave our baby in a hot car for an hour, we'll end up on the 6 o'clock news. And we would look pretty silly if we then went back to the daycare and tried to exchange it for a live one. "Knowing better" is the responsibility of the buyer. Once we leave the bee store, they are our bees and are under our care. (See January 2016 Get Thee to a Bee School for ways to get educated in beekeeping basics.)

Nucs are most commonly sold on deep frames but sometimes can be purchased on mediums. Don't assume one or the other; ask the seller! Medium nucs won't have as many bees, brood or stores because, hey, mediums aren't as big as deeps. However they will cost the same because they are the same amount of trouble and effort for the seller either way.

Advantages

1. The colony has a several-week head start on comb building and brood rearing compared to a package or captured swarm.
2. If the queen was the queen-mother for the nuc's brood (not simply installed shortly before the sale), we can assess her brood pattern.
3. Colonies on comb with open brood are far less likely to abscond than newly-installed packages or swarms.
4. Local producers often, but not always, are selling nucs made from stock that has proven successful in our area. Despite heated rhetoric on this topic, this isn't really a big deal – honey bees are robust and do well in a variety of climates – but it doesn't hurt. Also note that the definition of "successful" may vary significantly from a bee-seller versus a beginning hobby beekeeper. Ask what selection criteria a local producer uses for raising her/his bees.
5. Since nucs are typically sold directly from the source, the buyer has the opportunity to assess the credentials, experience and reputation of the seller.

Disadvantages

1. Nucs cost about a third more than packages. In other words, for slightly more than the price of two nucs, a new beekeeper could buy three packages (a pair and a spare!).
2. As with complete hives, it is easy to buy someone else's existing problems: disease, high varroa mite loads, etc. Ask what mite treatments have been used and when, when the apiary was last inspected for mites and what the percentage infestation was, whether the colonies have been inspected by the State (which is required by law for someone selling more than 10 colonies in a year), the seller's beekeeping experience and credentials, and any other questions you can think of. If you don't like the answers, buy elsewhere.

3. Nucs aren't uncommon but aren't nearly as abundant or universally available as packages. They are not shipped, so the buyer must travel to the seller to make a purchase.
4. Typically, nucs aren't available until at least a month or so later than the earliest packages. This can negate the "head start" advantage of nucs. Conversely, they are often available late in the season. This is great if someone needs to repopulate a failed colony that has a full complement of already-drawn comb but a late start is very unwise when starting a brand new colony.

Packages

A.I. Root introduced the idea of selling bees by the pound in 1879 and the industry as we know it was up and running by 1913. Packages of bees and queens can be safely and reliably shipped across the country, from a distant supplier to your local post office. Or a local reseller may travel to the supplier, most often in south Georgia, and bring back hundreds or even thousands of packages for sale at their local shop.

Package production is done in parts of the country that have long bee-growing seasons with very early springs, notably California, Texas, Florida and south Georgia. Almost all of the packages sold in our area are produced by one of a couple of large, professional outfits in south Georgia. These are well-respected, well-run family businesses that date back many generations. They supply bees to the entire Eastern US and are very good at what they do.

African honey bees (aka "killer bees") are well established in Texas, southern California and the lower half of Florida. Even though you can find suppliers from there on-line, please do not make the mistake of buying bees from those areas. It is fine for a beekeeper in Texas to buy vicious bees from Texas, but only an inexperienced chucklehead or arrogant fool would knowingly bring them to North Carolina. South Georgia is still considered a safe (non-Africanized) source of packages and queens.

Since the vast majority of packages sold around here come from exactly the same place, price, convenience and availability should be the primary factors in deciding where to purchase. It makes no sense to drive a hundred miles to buy a package that came from the same apiary as the ones being sold by the guy next door, unless you can get it substantially cheaper and earlier. In general, we want the earliest delivery date we can possibly get. Don't ignore the old adage: "A swarm in May is worth a load of hay; a swarm in June is worth a silver spoon; a swarm in July isn't worth a fly." For us, we should shift this up a month, starting in April, but that messes up the rhyme. The point is that a package (or swarm) installed at the end of March or first of April has a terrific chance of success. The later spring progresses, the less time there is for a colony to draw out a full complement of comb, build up a healthy population and store up sufficient food for winter. Remember that our main honey flow only runs from April to May, sometimes into June if we are lucky. Those are the "fat times" for honey bees. If a package isn't installed until June, the beekeeper faces an extremely challenging uphill battle with no guarantee of success.

This photo documents the beginning of my beekeeping adventure, encouraged and assisted by my daughter Martha. These two packages were the first and last bees I've ever purchased.

Packages, also known as "artificial swarms", are my sentimental favorite means of starting as a beekeeper. The only bees I have ever purchased, apart from queens I've brought in for their genetics, were the two packages I bought through the mail when I first started out. Since then I have helped others install their packages, including 250 that a group of us installed in a single afternoon for a research project. Package installation is a fun experience that every beekeeper should try even if it isn't with her/his bees.

I do not prefer the installation method promoted in a popular textbook whereby the open package is left inside the hive and removed a day or so later. This is completely unnecessary and requires an additional invasive hive visit. Furthermore, it invites the bees to begin building comb inside the package rather than on the foundation we have provided. Instead, once the queen cage has been attached inside the hive between the frames, the inverted package should be shaken out in a back-and-forth rocking motion directly over the frames. The entire operation takes a few seconds. There will be a few stragglers remaining in the package. The mostly-empty package should be placed on the ground near the hive entrance. The stragglers will soon join their sisters in the hive and the empty package can be retrieved the next day without disturbing the colony.

Neophyte beekeepers fear shaking out packages but bees in a package (or a reproductive swarm) are in the gentlest state they are ever going to be in. They may whirl around in a cloud but they have no home to defend so aren't aggressive. While it is remotely possible to get stung while installing a package or collecting a swarm, it isn't likely unless we accidentally pinch a bee. I always recommend wearing a veil (I value my eyesight!) but that's the only protective equipment that should really be necessary when installing packages.

Similarly, smokers shouldn't be used when installing packages because the smoke interferes with the bees' Nasonov pheromone reception. This is the "here is home" smell that bees release in order to assemble their sisters. We want the bees to congregate inside their new home with their new queen, so don't want to do anything to discourage that. A beekeeper can light a smoker and keep it within reach just in case something goes horribly wrong, but don't plan to use it. Please don't misunderstand: this advice about smokers only applies to installing packages. For regular inspections, smoke saves bees' lives by deterring stinging. There is no good reason not to use an appropriate amount of smoke when disturbing established colonies.

Advantages

1. Packages are the cheapest way to start out with purchased bees.
2. They are universally available, either at local resellers or through the mail.
3. Packages can be purchased earlier than nucs.
4. If full colonies are like "adults" and nucs are like "teenagers", packages are like "babies" or "puppies". They'll grow as your own experience and comfort level grows.
5. Packages should, on average, have the cleanest and healthiest bees of the three options if they are produced by the major Georgia apiaries.

Disadvantages

1. Packages, or any swarm, may abscond (totally abandon the hive) shortly after being installed. This usually doesn't happen but is a risk. Once the colony begins building comb and raising brood, the risk of absconding practically disappears.
2. Bees can be stressed in transit if ventilation and temperature aren't properly controlled.
3. The colony must start from nothing. In addition to the resource requirements this entails (e.g. converting carbohydrates to wax), this means that it will be at least 3 weeks before there are any more new bees in the colony, since it takes 21 days from egg to emergence of an adult worker. The colony population will decline until new bees begin to arrive. This is no different

than what occurs during natural swarming so isn't a "problem" as such; it is just means that a package cannot grow as rapidly as a nuc. If a beekeeper has existing hives, comb and brood can be borrowed from them to boost a package; this would, in effect, be a hybrid between a package and a nuc.

4. A package started in the late spring/early summer cannot be expected to thrive or survive long-term without a lot of effort and luck.
5. A package's appearance gives very little indication of how well it will do in the future.
6. It is not uncommon for a package to contain an unmarked queen hidden among the mass of worker bees in addition to the marked queen in the cage. This isn't a problem for a highly experienced beekeeper who recognizes what is going on but it can create chaos for everyone else. The workers will kill the caged queen, either while she is in the cage or after she is released. If the beekeeper tries to introduce another caged queen, the bees will kill her also and will continue to do so with any introduced queen as long as they have the queen that they came with. If you install a package and the bees kill the queen from the cage, ask an experienced beekeeper to carefully inspect the colony for the presence of an additional queen. Or wait two weeks before doing anything, giving the colony time to raise worker brood (quite obvious from the way it is capped), which clearly indicates the presence of a mated, laying queen.

Your choice

I hope it is clear that the form of bees that someone starts out with (full hive, nuc, package, natural swarm) is not a critical factor for success. It all works, which is why each of those variations remains popular. None is perfect – all have plusses and minuses. Your choice should be guided by your relative priorities related to expense, fun, ease and availability, as well as outside factors such as time of year. But you don't have to make a single choice… you could start with one of each and compare!

Regardless of how your bees will arrive, order early! Suppliers are already taking orders for next spring. They'll be filled on a first-come, first-served basis and supplies often run out.

The earliest delivery dates I've seen so far are during the last week of March. That timing would be excellent and would give the best assurance of success – don't settle for anything later if those early spots are available when you order. But realize that those dates are "if all goes well". Many years, delivery is delayed due to poor spring weather in south Georgia, which prevents packages and queens from being produced on schedule. So an early reservation date doesn't guarantee an early delivery date. That's another reason to get a spot on the list as close to the top as possible.

A list of producers and dealers who are legally authorized to sell honey bees in North Carolina can be found on the NCDA&CS website. As the posting indicates, "It is unlawful to sell queens, packages, nucs or hives before the Permit to Sell Bees in North Carolina has been issued. For North Carolina residents, a permit is not required for: (1) the sales of less than 10 bee hives in a calendar year; (2) a one time going out-of-business sale for less than 50 bee hives, or (3) the renting of bees for pollination purposes or the movement of bees to gather honey. " The list isn't an endorsement of the sellers; it simply shows those who are legally allowed to operate in our state. ***IMPORTANT NOTE:*** *Due to a paperwork mix-up, Bailey Bee Supply wasn't included in the 2016 list that was posted on-line, but rest assured that the store is authorized to sell bees in 2017.*

So stop reading now, go pick up the phone and order those bees! And remember, whichever option you choose, there's no need to fight about it!

Randall Austin is a NC Master Beekeeper keeps a few honey bee hives in northern Orange County. He can be reached at s.randall.austin@gmail.com.

APICULTURE PROGRAM
DEPARTMENT OF ENTOMOLOGY
NORTH CAROLINA STATE UNIVERSITY

Dedicated to the dissemination of information and understanding of honey bees and bee management

EXTENSION RESEARCH INSTRUCTION

HOW TO INSTALL A PACKAGE OF HONEY BEES

One of the more common means of starting a new beehive is by ordering live honey bees from a commercial vendor. Such 'packaged' bees typically contain about 12,000 live adult workers (approximately 3 pounds), one newly mated queen bee, and an inverted can of sugar water, all contained in a wooden box with screened sides (Figure 1).

When installing a package of bees, you should wear a veil and take appropriate precautions to prevent bees from crawling up you pant legs. You also will need a hive tool, a smoker, a small nail, a spray bottle filled with sugar syrup, and one or more gallons of sugar syrup to feed the new colony. To make the syrup, mix warm water with granulated or powdered sugar in a 1:1 ratio and mix thoroughly until all of the sugar is dissolved.

Step 1. Pick up your bees from the post office or other place of delivery. Carefully look over the package for any cracks or tears in the screen, and inspect the bees to make sure they are alive and in good health (it is normal to have about one inch of dead bees in the bottom of the box). If there is an excessive amount of dead bees, it may be an indication that they have been overheated during shipping, in which case you should contact your package provider. Spray the bees with sugar syrup; be generous, but be sure not to drown the bees!

Figure 1. A pallet of 3-lb packaged honey bees.

Step 2. Place the package in a cool, dark place to allow the bees to 'rest' for several hours before installing them into a hive. Make sure the bees are not exposed to excessive heat or cold, loud noise, or

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unusual vibrations. Periodically spray the bees with sugar syrup (1 part sugar, 1 part water) until you are ready to install the bees into a hive. This is a good time to make sure all of your hive equipment is ready.

Figure 2. Prepare a space in the hive in which to shake the bees.

Step 3. When your equipment is set up and you are ready to install the bees into the hive, feed the bees again with sugar syrup and carry the package (by holding the wooden sides) into the apiary. Be sure to keep your hands away from the screened sides of the package to avoid getting stung through the screen. Place the package on the ground in a shaded area.

Step 4. Remove three or four frames from the center of the brood chamber to create a space in the hive for the bees (Figure 2).

Step 5. Spray the bees again with sugar syrup.

Step 6. With the hive tool, remove the wooden panel from the first package of bees (Figure 3a). Gently remove the tin feeder and queen cage from the hole in the top of the box (Figure 3b). Shake bees from the outside of the queen cage and inspect the queen to ensure that she is still alive and healthy. Place the queen cage in the shade (Figure 3c). Replace the wooden panel over the hole to prevent bees from escaping (Figure 3d).

Step 7. Immediately before installing the bees into the hive, firmly knock the package on the ground once to make the bees drop to the bottom of the box. Be sure to hold the wooden lid in place while doing this.

Figure 3. (a) Remove the package lid. (b) Remove the feeder and queen cage. (c) Check that the queen is alive in her cage. (d) Quickly replace the package lid.

Figure 4. Shake the bees into the hive.

Figure 5. Let the remaining bees enter the hive.

Step 8. Next, remove the wood panel and quickly invert the package over the hive body. Firmly and vigorously shake the bees into the space in the hive (Figure 4). It might be necessary to shake the package several times. Don't worry if there are a large number of bees flying around; they are largely "confused" and therefore not defensive, and they will eventually settle down and enter the hive.

Step 9. Prop the package in front of the entrance of the hive so that any remaining bees in the package can crawl into the hive (Figure 5).

Figure 6. Replace the frames.

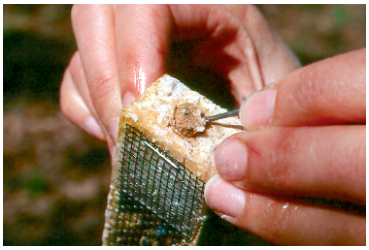

Figure 7. Gently remove the cork on the *candy* end of the queen cage.

Step 10. Gently return the frames to the hive after the workers have dispersed on the bottom board (Figure 6), being sure not to crush any bees.

Installing the queen

1. Remove the plastic cap from the long side of the queen cage with the white sugar candy (Figure 7). The bees will eat the candy and eventually release the queen within one or two days. This time-release method allows the bees to become accustomed to the queen, minimizing the chance that the bees will reject the queen. *Do not remove the cork on the end without the candy!*

2. Place the queen cage *candy side up* between two center frames of the hive (Figure 8). Make sure the cage is secure between the frames so that it does not fall to the bottom of the hive.

Figure 8. Secure the queen cage, candy-end up, in between the center frames.

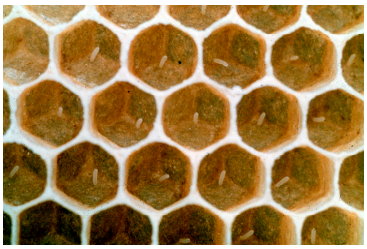

Figure 9. Newly laid eggs in the brood comb.

3. Feed the new colony with sugar syrup. *It is critical that the bees have an ample supply of food at all times, particularly before there is a sufficient supply of honey stored in the colony.* Replace the inner cover and lid.

4. Inspect the colony 5 days after installing the package to ensure that the queen is alive and has been released. Inspect the colony again after another 5 days to verify that the queen has begun laying eggs. Eggs appear as small grains of rice standing up in the center of cells (Figure 9). If necessary, add sugar syrup again at this time.

Troubleshooting

Sometimes, problems may arise while starting a new hive from packaged bees. Here are some common issues, and some potential solutions.

1. **"My queen was not accepted by the workers!"**

- Occasionally, the workers will not accept the queen either before or after she is released from her cage. You will know this has occurred if the queen is dead in the cage or missing from the hive. If this is the case, you may either:
    1. Insert a replacement queen from a commercial vendor, or
    2. Unite the hive to an existing colony by:
        - Placing a single sheet of newspaper on the top of the established hive, making sure that it is completely covered;
        - Poking numerous small holes into the newspaper with your hive tool;
        - Placing the hive body of the queenless colony on top of the hive body with the newspaper;
        - The bees will chew through the paper and unite with the queenlesss colony.

2. **"The bees are not building enough wax comb!"**

- Feed!!! Feed!!! Feed!!! Bees will build the wax comb in response to a need for it. Thus they require ample sugar syrup to secrete enough wax. Even when they are well fed, they may still take several weeks to furnish ten frames with wax comb.

3. **"The queen is present, but she is only producing drone brood!"**

- On occasion, a queen is not properly mated or has depleted her sperm stores. Thus she is only able to lay unfertilized eggs, which will develop into drones. As drones do no work in a hive, a colony consisting of only drones will quickly die out. You can identify a drone-laying, or 'failing', queen by the presence of a majority of drone brood throughout the colony. Drone brood is larger than normal worker brood and protrudes from the surface of the comb. If you find the queen to be a drone layer, the only solution is to replace the queen by one of the two methods described above.