

SUMMARY TABLE - TEST RESULTS

data

40

42

53

43

44

45

46

47

48

c
q
d
r
e
s
f
t
g
u
h
v
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w
j
x
k
y
l
z
m
aa

		n	% Correct	Std. error	p-value	a	b	c	d	e	Blank
Q1. Fly and bee. Which is the fly?	Pre	11	73%	0.14	0.303	73%	27%				0%
	Post	11	91%	0.09		91%	0%				9%
Q2. Wasp and bee. Which is the wasp?	Pre	11	73%	0.14	1.000	27%	73%				0%
	Post	11	73%	0.14		27%	73%				0%
Q3. Bee and flies. Which is the bee?	Pre	11	36%	0.15	0.102	18%	45%	36%	0%		0%
	Post	11	73%	0.14		18%	0%	73%	0%		9%
Q4. Bees. Which are honey bees?	Pre	11	55%	0.16	0.193	55%	0%	36%	9%		0%
	Post	11	82%	0.12		82%	0%	0%	18%		0%
Q5. What sex is this leafcutter bee?	Pre	11	45%	0.16	0.028	55%	45%				0%
	Post	11	91%	0.09		9%	91%				0%
Q6. Why are bees important for ecosystem functions?	Pre	11	55%	0.16	0.408	45%	0%	0%	55%	0%	0%
	Post	11	73%	0.14		27%	0%	0%	73%	0%	0%
Q7. What pollination services do bees provide us?	Pre	11	55%	0.16	0.015	36%	0%	0%	55%	9%	0%
	Post	11	100%	0.00		0%	0%	0%	100%	0%	0%
Q8. Where do most native bees' nest?	Pre	11	64%	0.15	0.035	64%	18%	9%	9%	0%	0%
	Post	11	100%	0.00		100%	0%	0%	0%	0%	0%
Q9. What features can help me distinguish a bee from a fly or wasp in my garden?	Pre	11	55%	0.16	0.068	9%	18%	0%	55%	18%	0%
	Post	11	91%	0.09		0%	0%	0%	91%	9%	0%
Q10. Why are native bee populations declining?	Pre	11	91%	0.09	0.363	91%	0%	0%	9%		0%
	Post	11	100%	0.00		100%	0%	0%	0%		0%
Overall	Pre	11	60%	0.05	0.009						
	Post	11	87%	0.03							

100% 0%
 100% 0%
 100% 0%
 100% 0%
 100% 0%
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 100%

SUMMARY TABLE - TEST RESULTS

Pre												Post											
n	11	11	11	11	11	11	11	11	11	11	11	n	11	11	11	11	11	11	11	11	11	11	
Question	1	2	3	4	5	6	7	8	9	10	average	Question	1	2	3	4	5	6	7	8	9	10	average
% correct	73%	73%	36%	55%	45%	55%	55%	64%	55%	91%	60%	% correct	91%	73%	73%	82%	91%	73%	100%	100%	91%	100%	87%
a	0.73	0.27	0.18	0.55	0.55	0.45	0.36	0.64	0.09	0.91		a	0.91	0.27	0.18	0.82	0.09	0.27	0.00	1.00	0.00	1.00	
b	0.27	0.73	0.45	0.00	0.45	0.00	0.00	0.18	0.18	0.00		b	0.00	0.73	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	
c	0.00	0.00	0.36	0.36	0.00	0.00	0.00	0.09	0.00	0.00		c	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
d	0.00	0.00	0.00	0.09	0.00	0.55	0.55	0.09	0.55	0.09		d	0.00	0.00	0.00	0.18	0.00	0.73	1.00	0.00	0.91	0.00	
e	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.18	0.00		e	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	
blank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		blank	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
sum	1	1	1	1	1	1	1	1	1	1		sum	1	1	1	1	1	1	1	1	1	1	
std dev	0.47	0.47	0.50	0.52	0.52	0.52	0.52	0.50	0.52	0.30	0.18	std dev	0.30	0.47	0.47	0.40	0.30	0.47	0.00	0.00	0.30	0.00	0.11
std error	0.14	0.14	0.15	0.16	0.16	0.16	0.16	0.15	0.16	0.09	0.05	std error	0.09	0.14	0.14	0.12	0.09	0.14	0.00	0.00	0.09	0.00	0.03

SUMMARY TABLE - FEEDBACK - COURSE RATINGS, LEARNING

		23	24	33	26	27	28	29	30	208		
		n	Mean	SE	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)		%	%
b	Informative	11	5.00	0.00	0	0	0	0	100		100	100
c	Useful	11	5.00	0.00	0	0	0	0	100		100	100
d	Engaged	11	5.00	0.00	0	0	0	0	100		100	100
e	Explain the importance of native bees in ecosystems and agroecosystems	12	4.75	0.13	0	0	0	25	75		100	100
f	Distinguish native bees from flying visitors that look like them	12	4.50	0.15	0	0	0	50	50		100	100
g	Use basic guide to ID the common native bees in Texas gardens, parks, or wildlands	12	4.33	0.14	0	0	0	67	33		100	100
h	Use my foundation of bee classification to learn more about native bee diversity	12	4.33	0.14	0	0	0	67	33		100	100
i	Describe management practices to conserve native bee habitats given my knowledge of their nesting habits & diet	12	4.50	0.15	0	0	0	50	50		100	100
j	Identify native prairie plants for native bees in Central Texas	12	4.25	0.18	0	0	8	58	33		100	92

SUMMARY TABLE - COURSE RATINGS

n	11	11	11	12	12	12	12	12	12
mean	5.00	5.00	5.00	4.75	4.50	4.33	4.33	4.50	4.25
1	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	0%	0%	0%	0%	0%	0%	0%	0%	8%
4	0%	0%	0%	25%	50%	67%	67%	50%	58%
5	100%	100%	100%	75%	50%	33%	33%	50%	33%
std dev	0.00	0.00	0.00	0.45	0.52	0.49	0.49	0.52	0.62
std error	0.00	0.00	0.00	0.13	0.15	0.14	0.14	0.15	0.18
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

NATIVE BEES OF TEXAS COURSE – FEEDBACK - 2018

TEST AND FEEDBACK PER PARTICIPANT (BEE NAMES = De-Identified)

[illegible]

NATIVE BEES OF TEXAS COURSE – FEEDBACK - 2018

Longhorn Bees	Percentage	A	B	C	D	B	A	A	C	A	A	1	1	1	0	1	0	0	0	0	0	1	50%	Longhorn Bees	Percentage	A	B	C	A	B	A	D	A	D	A	Student Curious	Percentage	1	1	1	1	0	1	1	1	1	1	0.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		

Rank	Best Small Corporation	Percentage of Environmental	Rank	Best Small Corporation	Percentage of Environmental
1	0	1	1	0	1
2	0	1	2	0	1
3	0	1	3	0	1
4	0	1	4	0	1
5	0	1	5	0	1
6	0	1	6	0	1
7	0	1	7	0	1
8	0	1	8	0	1
9	0	1	9	0	1
10	0	1	10	0	1
11	0	1	11	0	1
12	0	1	12	0	1
13	0	1	13	0	1
14	0	1	14	0	1
15	0	1	15	0	1
16	0	1	16	0	1
17	0	1	17	0	1
18	0	1	18	0	1
19	0	1	19	0	1
20	0	1	20	0	1
21	0	1	21	0	1
22	0	1	22	0	1
23	0	1	23	0	1
24	0	1	24	0	1
25	0	1	25	0	1
26	0	1	26	0	1
27	0	1	27	0	1
28	0	1	28	0	1
29	0	1	29	0	1
30	0	1	30	0	1
31	0	1	31	0	1
32	0	1	32	0	1
33	0	1	33	0	1
34	0	1	34	0	1
35	0	1	35	0	1
36	0	1	36	0	1
37	0	1	37	0	1
38	0	1	38	0	1
39	0	1	39	0	1
40	0	1	40	0	1
41	0	1	41	0	1
42	0	1	42	0	1
43	0	1	43	0	1
44	0	1	44	0	1
45	0	1	45	0	1
46	0	1	46	0	1
47	0	1	47	0	1
48	0	1	48	0	1
49	0	1	49	0	1
50	0	1	50	0	1

FEEDBACK RAW DATA (PARTICIPANT DE-ID BY #)

Participant	Please rate this event on how informative it was, how useful the knowledge and skills will be to you, & how engaged you were as a participant			As a result of today's workshop, I am better able to...							The best part(s) of attending this event was/were:	This event could be improved by:
	Informative	Useful	Engaged	Explain the importance of native bees in ecosystems and agroecosystems	Distinguish native bees from flying visitors that look like them	Use basic guide to ID the common native bees in Texas gardens, farms, or wildlands	Use my foundation of bee classification to learn more about native bee diversity	Describe management practices to conserve native bee habitats given my knowledge of their nesting habits & diet	Identify native prairie plants for native bees in Central Texas	Briefly describe how you intend to use skills/knowledge that you learned in today's session in your practice/home?		
1	5	5	5	4	5	4	5	5	4			
2	5	5	5	4	4	4	4	4	3	Add background to pollinators		Graph seems either wrong or many more samples were taken and logged of the bees without bare ground. As I read the graph, it suggests bees go up as ground is covered. Opposite of reality?
3	5	5	5	4	4	4	4	4	4	UT course project		

NATIVE BEES OF TEXAS COURSE – FEEDBACK - 2018

4	5	5	5	5	5	4	4	4	4	Reduce use of insecticides; grow pollinator garden	Exploring the gardens	Longer garden time
5	5	5	5	5	5	5	4	4	4	I intend to teach others about native bee populations & behaviors, and to plant native plants!	Learning about how bees build their nests, especially the separated	Talking a little bit more about identifying plants!
6	5	5	5	5	4	4	4	4	4	Teach others and improve habitat	Handouts, style of presentation/photos on screen	More sharing of info between participants
7	5	5	5	5	5	5	5	5	5	I can plant more bee specific plants	Learning from an expert and going outside	[heart with arrow going through it]
8	5	5	5	5	5	4	4	5	5	I'm converting a small lawn (500 ft2) to native TX wildflower meadow	ID and conservation	I wish this workshop were longer or multi-segment!
9	5	5	5	5	4	5	4	5	5	Increase diversity of bees in my yard	Nice mix of lecture, lab and field time	
10				5	4	4	5	5	4	Keep more leaves on ground and use as mulch. Also plant more native plants	Being at the Wildflower Center. Learning more about the native life	I thought the class was great
11	5	5	5	5	4	4	4	4	5		I didn't know that many bees were ground nesters! Makes a huge difference in how I will garden in the future - real aha moment	Nothing that could have been done by the presenter...weather could have cooperated
12	5	5	5	5	5	5	5	5	4	For master gardener training sessions lecture to garden clubs	All parts were extremely useful	an increased time, another couple of hours