

Vol. III, No. 20. Washington, D. C. Oct. 18, 1883.**52.—NOTES ON THE EDIBLE QUALITIES OF GERMAN CARP AND HINTS ABOUT COOKING THEM.**By **CHAS. W. SMILEY.**

The introduction of carp into the United States is of so recent date that there has been, as yet, but little opportunity to grow them of sufficient size to eat; or to get a full expression from our people of their opinions of carp as food. The first distributions by the United States Fish Commission were in 1879 and 1880. Many of those fish were put into unsuitable places and perished. Many persons whose carp have survived have prized them so highly that they have persistently refused to allow any to be eaten. As, however, an occasional newspaper muttering has come to hand, it has been thought best to get together at once what information might be available.

About the first of July, 1883, a circular was prepared containing fifteen questions, covering the whole field of carp-culture. One of these questions was as follows: "Have you eaten carp? How were they cooked, and what was the opinion of their edible qualities?" This circular was sent out, July 20, 1883, by direction of Professor Baird, to all persons who appeared from the records of the United States Fish Commission to have received young carp in 1879 and in 1880.

There have been received thus far over 600 replies, and from these have been copied verbatim everything which correspondents have said with reference to this subject. Over 350 had not yet tasted carp.

Finding that there was an occasional remark of an uncomplimentary character, I inquired of Professor Baird with reference to publishing any adverse statements. In reply, he said: "Certainly it is not our policy to suppress honest criticism of the carp, and you are authorized to collate the testimony and publish both sides. **NO FISH IS FIT TO BE EATEN DURING AND IMMEDIATELY AFTER THE SPAWNING SEASON.** Unless criticisms have been made of the fish during the late fall or early spring they do not affect the question." I have accordingly classified and will present herewith every scrap of testimony—good, bad, and indifferent—which has been received in reply to these circulars, together with such incidental remarks as had previously reached the United States Fish Commission. Of these latter, there are not over half a dozen, and they are mostly indicated by an earlier date attached.

I have spoken thus definitely concerning this material because when treated with exact impartiality the opposition to the food qualities of carp dwindles down into such utter insignificance that some one might easily suspect me of culling the material. * This point is especially to be guarded, because it is so often considered praiseworthy to suppress criticism which is prompted by ignorance of facts and which might unjustly injure a good cause. And I am very sure that every unfavorable

opinion of carp herewith presented, except perhaps that of Mr. Epes, is based upon ignorance or forgetfulness of one of three facts:

I. No fish should be eaten during or immediately after the spawning time.

II. The muddy taste of any fish can be largely removed by keeping the fish alive in a tub of pure water, changing it daily for a week.

III. Bad cooking will spoil the best of food.

Reports upon the edible qualities of carp have been received from twenty-three States and Territories, as follows:

Table showing the number of each kind of reports received from the various States and Territories.

State.	I. Fair to very good.	II. Emphatic praise.	III. Favorable comparisons with other fish.	IV. Sometimes soft or muddy.	V. Criticisms.	VI. Bones.	VII. Cooking.	Total.
Alabama.....	1	3	1				1	6
Colorado.....			1					1
Connecticut.....				1			1	2
Georgia.....	1	11	4	1	1	1	3	22
Illinois.....		3						3
Indiana.....							2	2
Kansas.....						1	1	2
Kentucky.....		6			3	1	3	13
Maryland.....	6	21	16	4	2		7	56
Mississippi.....		5	3		1			9
Missouri.....		1	2		1	1		5
New Jersey.....	1			1	1	1		4
New York.....	2	1		1			2	6
North Carolina.....	3	6	2	1				12
Ohio.....	4	4	2	1	1		4	16
Pennsylvania.....	2	2	1	2			2	9
Rhode Island.....		1						1
South Carolina.....	1	1	2					4
Tennessee.....	4	5	3	2		1	1	16
Texas.....	3	12	1					16
Utah.....							1	1
Virginia.....	7	14	1	4		1	1	28
West Virginia.....	4			1			1	6
Canada, etc.....	1						1	2
Total.....	40	96	39	19	10	7	31	242

For convenience of reference the testimonies are classified as follows:

	Numbers.
I. Moderate praise, from fair to very good, 1-40.....	40
II. Unqualified praise and very emphatic expressions of approval, 41-136.....	96
III. Comparisons with other fish, very generally complimentary, 137-175.....	39
IV. Criticisms as to softness or muddy taste, 176-194.....	19
V. Indifferent and uncomplimentary reports aside from muddy taste and softness, 195-204.....	10
VI. A few opinions in regard to bones, 205-211.....	7
VII. Favorable reports, containing hints upon various ways of cooking carp, 212-242.....	31
Total.....	242

Of these 242 reports, 38 only contain the slightest reflection upon carp (Nos. 141, 144, 149, 151, 159, 166, 176-194, 195-204, 208, 209, 210). Many of these objections are declaredly slight. All but one (No. 194) of the criticisms have already been explained away, and I believe we possess the clew to that one.

1. MODERATE PRAISE—VERY FAIR TO VERY GOOD.—In this list are included 40 testimonies, entirely satisfactory in character; 21 of which, in speaking of the edible qualities of carp, pronounce them "good," 14 "very good," and 5 "fair," "very palatable," &c. These statements come from thirteen different States of the Union; but rather largely from Maryland, Virginia, West Virginia, Tennessee, and Ohio. Messrs. Wilmot (5), White (21), Peirce (22), and Duke (39) are men of very large experience with fish, and weight should attach to their testimonies. The method of cooking most frequently named is frying, though all methods are included in this group of statements.

2. UNEQUIVOCAL PRAISE AND VERY EMPHATIC EXPRESSIONS OF APPROVAL.—Under this head are grouped 96 different testimonies. Of these, 15 speak of carp as "very fine," and 21 as "excellent"; and others ring the changes on such expressions as "very good indeed," "first rate," "first class," "extra," "splendid," "very superior," "superb," "delicious," "the best of fish"; while quite a good many go on to say that carp are equal or superior to any other fish, or that they never ate anything more delicious. Such testimonies in so large number are, of course, very gratifying, although the Fish Commission has never pretended that carp would take as high a rank as many of these people have given it. These assurances come largely from Maryland, Virginia, Texas, Kentucky, and Mississippi—sixteen States in all. Among the writers are several men of distinction, such as State fish commissioners, editors, physicians, and farmers and planters of wide experience. In many cases the single testimony represents the opinions of whole families or neighborhoods.

3. COMPARISONS WITH OTHER FISH.—Some 39 correspondents have chosen to express their opinions by comparisons rather than in absolute terms; and here we have carp successively declared equal to buffalo, mullet, suckers, mud-fish, croakers, mill-roach, perch, rock-fish, drum, bass, trout, sun-fish, red-horse, mackerel, red snapper, and shad.* Of course the Commissioner, in bringing carp from Germany, did not for a moment suppose that he was introducing a fish equal in delicacy to trout, bass, or shad; but he has always claimed that its edible qualities were equal or superior to those of such fish as suckers, catfish, perch, buffalo, mullet, and sun-fish, and that by reason of its rapid growth, hardihood,

* Most of the fish with which carp have been compared unfavorably are carnivorous species. To raise these on meat is expensive. Carp are vegetable feeders, and adapted to districts where fish are scarce and so remote from the ocean that sea fish cannot be obtained, but where corn, cabbage, pumpkins, squashes, potatoes, &c., are abundant and cheap. The Commission does not offer nor commend carp to those who have access to the better sea fish, such as salmon, trout, whitefish, &c. Compared with vegetable feeders, there is no question of the great superiority of carp.

and simple diet, it was more desirable for pond cultivation. Several of these replies (Nos. 100, 101, 140, 177, 186) indicate that scale carp are received more favorably than leather carp, while none speak of leather carp as superior to the scaled variety. In making these comparisons with other fish, all but six (Nos. 141, 144, 149, 151, 159, 166) place carp ahead of the fish with which they compare them. The reports cover the same wide range of territory as those in the preceding groups; here, as in the previous divisions, however, Maryland furnishing the larger number. The earliest distributions of carp were made to this State, probably on account of its proximity to Washington.

4. CRITICISMS AS TO SOFTNESS OR MUDDY TASTE.—Under this head are gathered 19 reports, a part of which speak of the carp as tasting muddy, and part alluding to their softness. Under other heads, No. 144 speaks of an "earthy taste," and Nos. 187 and 213 testify that soaking in salt water removed this taste. It may also be stated that removing the fish from a muddy pond, in which they would necessarily partake somewhat of the nature of their food, to a tank or tub of fresh water for a week, would very largely purify their systems. Carp is no exception to the rule that the flesh of animals will be affected by their food, but fish are exceptional in the ease with which this difficulty may be overcome. Many who have spoken of carp as being soft have betrayed their ignorance of the fact that the flesh of all fish becomes soft and unsuitable for food during, and for a time after, spawning. Some of these correspondents have stated the time of the year when they ate their carp, thus conclusively proving this hypothesis. Particular attention is called, in this connection, to Nos. 39, 181, 190, 191, 192, 193. In regard to No. 194, it can only be said now that the water of the tank in which the gentleman kept his carp must in some way have become contaminated and have imparted its injuriousness to the carp. It is intended, however, to make a special investigation of this case, to ascertain what the contamination consisted in. While some have spoken of the sweet taste of carp (Nos. 55, 139, 189, 222), only Mr. Epes has objected to them as "too sweet" or "sickening."

5. OTHER UNCOMPLIMENTARY REPORTS.—Of the 194 testimonies above considered, none have presented unexplainable objections except perhaps Mr. Epes. We now come to 10 testimonies, most of which are lacking in particulars, in which are used such expressions as "nothing extra," "unfavorable," "very poor," and, in three cases, "unfit to eat." There is, however, nothing to contradict the supposition that these people tried their carp in the spawning season, in which, as has already been said, any fish is unfit to eat. The anonymous newspaper clipping, No. 204, well illustrates the exaggerations in which people sometimes indulge when they know that they can conceal their names.

6. THE BONES.—Most people have given up the ridiculous hunt for a fish without bones; but, while four (Nos. 141, 208, 209, 210) have found more bones than they liked in the carp, six (Nos. 136, 185, 205, 206, 207, 211) found fewer bones than they expected.

7. HINTS UPON COOKING.—In 31 additional cases, correspondents, all praising the flavor of their carp, have added some suggestions as to the method of cooking. It is quite noteworthy that every person who has imparted some information about the proper methods of cooking has praised the carp. All methods of cooking have indorsements but the large majority speak of frying. The number of times that different methods of cooking have been mentioned is as follows: Fried, 163; baked, 35; boiled, 20; broiled, 14; stewed, 5; a combination of boiling and baking, 2.

One (No. 91) advises frying the young and baking the old, and those who recommend baking usually speak of using large fish. The recipe in No. 242 is especially commended to those who would fry carp. The author of the wine method (No. 238), Mr. Blackford, will be recognized as one of the New York commissioners, and the retail fish-dealer of the Fulton Market.

I.—MODERATE PRAISES—FROM FAIR TO VERY GOOD.

1. FAIRLY GOOD.—I have eaten three mirror carp that unfortunately jumped out of a tub of water one night. Their edible quality was fairly good. They were fried in butter.—THEODOTUS GARLICK, *Bedford, O.*

2. FAIR.—Yes; fried; fair edible fish.—N. BLACKWELL, *Bartlett, Tenn.*

3. FAIR.—We have eaten them; they were fried, and of fair quality.—B. C. HINNANT, *Daingerfield, Tex.*

4. VERY PALATABLE.—Fried in bacon grease they are very palatable.—JOHN M. FERGUSON, *Alderson, W. Va.*

5. NOT INFERIOR.—As a table fish carp is not of an inferior quality by any means, and is largely consumed in the principal cities of Central Europe, as Vienna, Berlin, and Paris.—S. WILMOT, *New Castle, Ont.*

6. GOOD.—We ate four fried. They were good.—SOLOMON BYER, *Norton, Ohio.*

7. GOOD.—We have eaten a dozen or more, fried. All pronounce the fish good.—E. A. WELCH, *Catonsville, Md.*

8. GOOD.—Yes; they were cooked in water and eaten with butter sauce. The opinion of their edible qualities was a good one.—G. HILLJE, *Schulenburg, Tex.*

9. GOOD.—My family has, and said it was good. It was boiled. It was taken in hot weather in July.—E. B. WOODRUFF, *Morristown, N. J.*

10. GOOD.—I have. They were fried. The flavor was good.—Mrs. S. A. TEEL.—*Kyle, Tex.*

11. GOOD.—They were cooked by a recipe from an English cook-book, and were good.—SAMUEL HOPKINS, *Highland, Md.*

12. GOOD.—Two. Fried in butter. Good.—LEWIS W. RUNNER, *Morgantown, W. Va.*

13. GOOD.—I have eaten but one, and was pleased with its flavor.—E. B. ISETT, *Spruce Creek, Pa.*

14. GOOD.—I ate the two caught a year ago last spring. Fried, they are good fish.—J. M. MCADOO, *McEwen, Tenn.*

15. GOOD.—We have eaten but one, and that was fried. We think they are a good fish.—J. B. HAWXHURST, *Homowack, N. Y.*

16. GOOD.—We ate one fried, and pronounced it good.—S. P. McFALL, *Newton Falls, Ohio.*

17. GOOD.—Have eaten them boiled and fried, and think them a good fish.—WILLIAM SHIRLEY, 5 S. Calvert street, *Baltimore, Md.*

18. GOOD.—We have eaten three fried. Their quality was good. I like them well.—J. B. HAGER, *Board Tree, W. Va.*

19. GOOD.—Have eaten some fried, and found them good.—R. D. MILLER, *Farmville, Va.*

20. GOOD.—One; fried. Good.—ABNER T. HOLT, *Bolingbroke, Ga.*

21. GOOD.—One small scale carp, accidentally killed in draining the pond, was fried as a pan-fish, eaten in my family, and pronounced good.—C. S. WHITE, *Romney, W. Va.*

22. GOOD.—I have not yet tasted carp. I prize my large ones too highly to kill them. Several friends have tested their table qualities, and all pronounce them good.—MILTON P. PEIRCE, *Philadelphia, Pa.*

23. GOOD.—I heard my son say he ate one, and that it was good.—DAVID BOWMAN, *Timberville, Va.*

24. GOOD.—Have eaten one fried, and found it good.—SOLON M. BOWMAN, *Timberville, Va.*

25. GOOD.—I ate one last year; don't remember how it was cooked. The edible qualities were good.—A. F. WHITMAN, *Nashville, Tenn.*

26. GOOD.—I have eaten only one. It was stewed, and part of it was fried. I consider it a good fish.—JAS. A. PETERKIN, *Fort Motte, S. C.*

27. VERY GOOD.—Yes. In the winter of 1882-'83, the pond was drained by muskrats and the carp were killed. The older ones then weighed nearly 3 pounds. They were considered very good eating.—RUSH TAGGART, *Salem, Ohio.*

28. VERY GOOD.—Two; fried; very good.—WILLIAM I. DUNN, *Sepulga, Ala.*

29. VERY GOOD.—Yes; boiled, baked, and fried. The edible qualities were very good.—P. C. CARLTON, *Statesville, N. C.*

30. VERY GOOD.—Only one; very good.—DAVID FARLOW, *Level Plains, N. C.*

31. VERY GOOD.—Those taken we ate. They were fried, and considered very good.—A. J. MICHENER, *Colora, Md.*

32. VERY GOOD.—Yes; and consider them very good. We ate one yesterday; fried.—FREDERICK ZAHN, *Frizzellburgh, Md.*

33. VERY GOOD.—The one I caught was fried, and was thought very good.—R. WELBY CARTER, *Upperville, Va.*

34. VERY GOOD.—I had one fried, and considered it a very good fish. It weighed 2½ pounds.—W. J. PRICE, *Fincastle, Va.*

35. VERY GOOD.—I caught one last year weighing about one-half

pound, which was cooked and thought very good by the family.—JAMES A. VAN BRUNT, 75 *South street, New York, N. Y.*

36. VERY GOOD.—I have eaten some, fried. I suppose they would eat better to some party who had not raised them. Others who have eaten them pronounce them very good.—FRANK W. GREEN, *Nashville, Tenn.*

37. VERY GOOD.—Fried. I thought they were very good.—WM. ARBAUGH, *Carrollton, Md.*

38. VERY GOOD.—We have eaten only two; fried in a pan. They were very good.—W. W. GRIER, *Charlotte, N. C.*

39. VERY GOOD.—I ate one of about 1 pound weight in 1882, and another this spring. I thought them very good. This fall, after they have recovered from spawning, I will try another large one.—RICHARD T. W. DUKE, *Charlottesville, Va.*

40. GOOD AND VERY GOOD.—We have eaten one. It was fried in lard, and was pronounced good, and very good.—MICHAEL SHANK, *Harrisonburg, Va.*

II.—UNQUALIFIED PRAISE AND VERY EMPHATIC EXPRESSIONS OF APPROVAL.

41. VERY GOOD, INDEED.—Yes; one was taken out May 17, 1883, a very fine fish. It weighed 7 pounds less 1 ounce, and measured 22 inches. It was baked, and pronounced very good, indeed, by all who ate of it.—JAMES BAYLISS, *Massillon, Ohio.*

42. VERY GOOD, INDEED.—Yes; fried. They are very good, indeed.—W. B. CHAPMAN, *Macon, Ga.*

43. HIGHLY ESTEEMED.—I have not; but hear of some that have, and that they are highly esteemed.—SHOTWELL POWELL, *Keysville, Va.*

44. WELL PLEASED.—We ate one, baked, that got caught in the chute. We were well pleased with the edible qualities.—A. H. BAKER & Co., *Fairfield, Ill.*

45. HIGHLY PLEASED.—We ate two. They were fried. We were highly pleased.—LOWREY & BERRY, *Blue Mountain, Miss.*

46. GOOD AND RICH.—We broiled two, and found them of good flavor, fat, and rich.—GEO. N. FALK, *Lenoir, N. C.*

47. JUICY AND GOOD.—We ate three fried, and all were well pleased. They were juicy and good.—W. N. REEVES, *Eufaula, Ala.*

48. RICH, JUICY, BUT NOT DELICATE.—I have eaten about 3 or 4 fried. It is a good pan-fish, rich and juicy, but flesh not delicate.—I. RANDOLPH MORDECAI, *Baltimore, Md.*

49. DELICATE, WHITE, AND VERY NICE.—They are solid, delicate white meat, and very nice. They were fried.—JNO. R. BROWN, *Woodstock, Md.*

50. VERY NICE.—I ate one fried that weighed about 8 pounds, and it was very nice.—THOS. LONGBOTHAM, *Wortham, Tex.*

51. VERY NICE.—We have cooked them two or three ways, and find that the larger ones are very nice.—O. A. GILMAN, *Paris, Ky.*

52. VERY NICE.—I ate two of them fried; they are very nice.—JOHN HEETER, *Hunting Hill, Md.*

53. VERY TOOTHsome.—Yes; fried; and pronounced as very toothsome by all who had the pleasure of partaking of them.—JACOB G. HEILMAN, *Jonestown, Pa.*

54. VERY FINE BAKED; GOOD FRIED.—I have eaten three that were caught while fishing with hook for other fish and wounded in the mouth. We baked one three-pounder. It was very fine; flesh firm; good flavor. We fried one of 2½ pounds. It was quite good.—JOHN G. KEITH, *Jackson, Tenn.*

55. VERY FINE, SWEET, AND RICH.—All report them very fine eating; very fat, sweet, rich, and toothsome when fried.—H. C. LOOSE, *Hagerstown, Md.*

56. THE DUTCHMAN SAID IT WAS FINE.—The one who proposed my getting carp suggested that I bring it to him and let him serve it up, as he knew all about it, and that I should dine with him. I consented. The carp was eaten. I was not told when, but the Dutchman said it was fine.—P. S. CLARKE, *Hempstead, Tex.*

57. FINE.—Yes, sir; and it was fine. It was fried.—J. N. THOMASON, *Paris, Tenn.*

58. FINE.—Have eaten them fried; weight, 4 and 10 pounds. They were pronounced by all to be a fine fish for the table.—Mrs. A. B. WATTS, *Newton, Miss.*

59. VERY FINE.—Yes; and very fine. They were fried.—W. H. SHIRLEY, *Harrisonville, Md.*

60. VERY FINE.—I ate two of them. I had them baked. Their edible qualities were very fine.—JAMES BUMGARDNER, sr., *Greenville, Va.*

61. VERY FINE.—I have eaten them baked and broiled. They are a very fine food fish.—THOMAS HUGHLETT, *Easton, Md.*

62. VERY FINE.—My wife caught one with her hands when I was from home. She pronounced it very fine. She fried it in lard.—J. A. DULA, *Lenoir, N. C.*

63. VERY FINE.—I ate one; baked it. The flavor was very fine.—C. W. ALEXANDER, *Charlotte, N. C.*

64. VERY FINE.—I have eaten several while some of my friends were participants. All pronounced them very fine cooked by frying in plenty of lard.—S. M. CLAYTON, *Cyruston, Tenn.*

65. VERY FINE.—They are very fine.—WM. ELLIOTT, *Taylor, Tex.*

66. VERY FINE.—Persons who have eaten them cooked in the ordinary way (fried) say they are very fine.—C. J. WATSON, *Munfordville, Ky.*

67. VERY FINE.—I have not. Those of my neighbors who have pronounced them very fine, either fried or boiled.—T. M. HIPNER, *Mortonsville, Ky.*

68. VERY FINE.—In my absence one of the oldest was caught with a hook. When landed the line parted, and the fish was injured so that

it could not be returned to the pond. It was fried and pronounced by the family very fine.—JAS. G. FIELD, *Gordonsville, Va.*

69. VERY FINE.—I ate two of them and found them a fish of very fine quality, much better than I anticipated.—F. S. EVERIST, *Port Deposit, Md.*

70. VERY FINE.—I have eaten a few. They were fried as we usually fry other fish. I found them very fine pan fish.—JOHN MCFADDEN, *Sudlersville, Md.*

71. VERY FINE.—The few eaten were fried, and were very fine food—remarkably good.—CHRISTOPHER & ROBERTS, *Fairburn, Ga.*

72. VERY FINE.—What fish I have taken from my pond to eat I have had baked and have found them very fine eating.—I. C. PLANT, *Macon, Ga.*

73. VERY FINE INDEED.—We ate only two. These were fried, and we considered them very fine indeed, and only wished we could have more.—H. L. SPENCER, *Social Circle, Ga.*

74. NUMBER ONE.—Yes, they were fried, and were thought by different persons to be No. 1.—THOMAS R. TULLOSS, *Rock Hill, Tenn.*

75. FIRST RATE.—I have, fried; first rate.—LEWIS BARLOW, *Sykesville, Md.*

76. FIRST RATE.—I have tasted three of the oldest. They were fried, and the quality was first rate.—J. M. BROOKS, *Waterford, Miss.*

77. FIRST CLASS.—My neighbors and myself ate one, after frying it as we would any other fish, and all unite with me in pronouncing it a first-class table fish.—GEORGE M. EMACK, *Versailles, Ky.*

78. FIRST CLASS.—Yes, fried. They are first class in every way.—J. A. LONG, *Yanceyville, N. C.*

79. FIRST CLASS.—Had one cooked. It was first class.—W. G. DELASHMUTT, *Martinsville, Ill.*

80. FIRST CLASS; WHITE AND FINE.—I caught two last year that weighed $5\frac{3}{4}$ lbs. We baked them, and regard them first class either baked or fried. The flesh is of a white texture, and fine.—A. SHINKLE, *Covington, Ky.*

81. EXTRA.—We have caught and eaten some fried, and claim them to be extra in quality.—S. O. HAWKINS, *Bucks, Ohio.*

82. GOOD ENOUGH; EXCELLENT.—Yes, a great many, both fried and baked. By our best judges carp is considered excellent. They are good enough. On account of their rapid growth and size they are better for baking.—GREENE B. MOBLEY, *Eutaw, Ala.*

83. EXCELLENT.—Yes, fried. They were pronounced excellent by every one who tasted them.—ABRAM E. NULL, *Union Bridge, Md.*

84. EXCELLENT.—Yes, one that was caught. It was fried, and considered excellent eating.—R. K. DABNEY, *Powhatan C. H., Va.*

85. EXCELLENT.—We have eaten one in April. It was pronounced by all a fish of excellent quality.—I. C. DONALDSON, *Gilbertsville, N. Y.*

86. EXCELLENT.—My partner ate one, and pronounced it excellent.—A. P. BROWN, *Jefferson, Tex.*

87. EXCELLENT.—We had them fried once; they were pronounced to be excellent.—J. W. SHIMWELL, *Prince Frederick, Md.*

88. EXCELLENT.—Four, fried. Taste excellent.—CHARLES SENSEMAN, *West Charleston, Ohio.*

89. EXCELLENT.—We ate two old fish and five young ones. Fried. Quality excellent.—GUSTIN HAVENS, *Lewis Center, Ohio.*

90. EXCELLENT.—Have eaten some and think them an excellent table fish.—HARRISON SUMMEROUR, *Warsaw, Ga.*

91. EXCELLENT.—Yes. Fried the young ones, and baked the old ones. Edible qualities were excellent.—W. M. THORNTON, *Lake, Miss.*

92. EXCELLENT.—One, fried, was excellent.—A. H. WILKINS, *Whitesborough, Tex.*

93. EXCELLENT.—Only one, which was fried. All who tasted it pronounced it excellent.—FRANCIS PRIDE, *Cedar Hill, Tenn.*

94. EXCELLENT.—In the summer of 1882, with hook and line, I caught three, one weighing $3\frac{1}{2}$ pounds, the other two $2\frac{1}{2}$ and $2\frac{1}{2}$ pounds, respectively. They were fried, and pronounced by the company to be "excellent."—JOSEPH LIGON, *Massie's Mills, Va.*

95. EXCELLENT.—Got surprised. Yes; broiled and they were excellent in flavor and consistency—much to my surprise.—R. EMORY, M. D., *Taylor, Md.*

96. EXCELLENT.—I have eaten carp in Europe frequently and found them an excellent pan-fish.—C. BOHN SLINGLUFF, *Towson, Md.*

97. EXCELLENT.—I have eaten none myself; but those caught in Hardware were said to be excellent fried and boiled.—HENRY M. PRINCE, M. D., *Scottsville, Va.*

98. EXCELLENT.—We had two cooked; one baked, the other fried. They were excellent.—EMANUEL HEYSER, *Madison, Ga.*

99. EXCELLENT; NOT GAMY NOR FISHY.—Yes, one. Baked and stuffed. The meat was white and of the consistency of shad. It had no game taste whatever and none of the fish taste. With condiments and being well cooked, all pronounced the dish excellent.—WM. E. SMITH, *Albany, Ga.*

100. SCALE CARP EXCELLENT.—Ate several fried. The scale carp I consider excellent. The leather carp not so good.—H. B. DAVIS, *Macon, Ga.*

101. EXCELLENT; SCALE CARP THE BEST.—I have eaten one of each variety and much prefer the scale carp to the leather. They were boiled and considered excellent.—A. W. OVERTON, *Frankfort, Ky.*

102. MOST EXCELLENT.—Have eaten one—fried it. Think it a most excellent table fish.—C. C. DAVID, *Harmony Grove, Ga.*

103. MOST EXCELLENT.—Mayor T. J. Jarratt had one of the carp baked and it was pronounced by himself and other members of the family and also by Capt. E. A. Goodwin, who was invited to partake of it, as a

most excellent fish. Mr. Coleman, the keeper of the Central Park, also speaks of it as very palatable.—*Petersburgh, Va., Index-Appeal*, August 12, 1882.

104. SPLENDID; NONE BETTER.—We have eaten some. We had them fried, and thought they were splendid. I don't think there could be any better fish.—JAMES W. OGLE, *Union Bridge, Md.*

105. SIMPLY SPLENDID.—Fried, and simply splendid.—M. S. GILMER, *Mathews, Ala.*

106. VERY SUPERIOR.—They are cooked according to fancy, as other varieties, and are very superior in flavor. As a baking fish they are very superior.—L. T. WHEELER, *Corsicana, Tex.*

107. SUPERB.—We ate one, which was superb.—PETER BONDS, *Harrisonburg, Va.*

108. SUPERIOR.—We have eaten a few of them and consider them a good eating fish. They were cooked the same as shad—fried. We look upon them as a superior fish.—JAMES HARBAN, *Dayton, Md.*

109. DELICIOUS.—Only once. They were fried in the usual way and were pronounced very palatable and delicious.—DANIEL WOLF, *Fairplay, Md.*

110. DELICIOUS.—Yes. They were fried and were delicious.—THOMAS V. RICHARDSON, *Phoenix, Md.*

111. DELICIOUS.—Fried; they were delicious.—J. M. WALLER, *Mexia, Tex.*

112. DELICIOUS.—Only one, weighing 3½ lbs., which was fried, and my family pronounced it delicious.—SAMUEL ANDERSON, *Rutland, Md.*

113. DELICIOUS.—Only upon one occasion, and fried. It was delicious.—J. W. DOWNEY, M. D., *Newmarket, Md.*

114. GOOD AS HE WANTS.—I have eaten 2 of the first lot merely to try them. The quality was as good as I want. They were only fried.—M. B. E. KLINE, *Broadway Depot, Va.*

115. FINE AS EVER TASTED.—I have eaten one and had it fried. It was as fine a flavored fish as I ever tasted.—W. K. HUNTER, *Rolesville, N. C.*

116. OILY AND FINEST FISH HE EVER ATE.—We have eaten nine and given away three. We fried them like other fish. They contained nearly oil enough to cook themselves and were very fine—finest I ever ate.—HENRY PULSE, *Harrisonburg, Va.*

117. NEVER ATE BETTER FISH.—One killed through mistake was fried, and we never ate a better fish.—ROBT. H. RICKS, *Rocky Mount, N. C.*

118. NEVER ATE BETTER FISH.—Have had them fried and don't think I ever ate any better fish in my life.—MRS. M. A. WALLACE, *Sherman, Tex.*

119. NEVER ATE BETTER FISH.—Have fried them, and never ate better fish.—WM. O. YAGER, *Luray, Va.*

120. BETTER THAN ANY OTHER FISH.—I have had three messes; one

last year, and two since. They were fried. They eat very well—better than any other fish in the country.—J. T. LOW, *Saulsbury, Tenn.*

121. VERY BEST.—We eat two large ones. They were broiled. The quality was of the very best.—DR. SAMUEL HAPE, *Hapeville and Atlanta, Ga.*

122. BEST OF FISH.—I have eaten 5 or 6 weighing from 1 to 1½ lbs. each. We fried them in butter, and all who have partaken of them have pronounced them the best of fish.—MICHAEL WILLAX, *Baltimore, Md.*

123. BEST THEY EVER ATE.—We have eaten one which was fried. It was decidedly the best we ever ate. This was testified to by several.—JOHN C. WENGER, *Dayton, Va.*

124. BEST FISH HE EVER ATE.—Yes, they were broiled and were very nice—the best either of salt or of fresh water fish that I have ever eaten.—H. G. SANFORD, *Warren, R. I.*

125. BEST FISH THEY EVER DID EAT.—Yes, we used them all last summer, and gave a mess to all our friends and neighbors. All with one voice say they are the best fish they ever did eat, and we say so too. Cook them as you please. They are good enough for any man.—SAMUEL McCLELLAND, *Salt Springs, Mo.*

126. NEVER ATE A SUPERIOR FISH.—In draining my ponds last year I caught a carp 18 inches long and had it fried. I never ate a superior fish. My family pronounced it excellent.—E. G. PEYTON, *Hazlehurst, Miss.*

127. SUPERIOR TO ANY OTHER FISH THERE.—We have eaten two which were fried. They were delightful and have superior qualities over any other fish here.—WM. L. HUDSON, *Luray, Va.*

128. FAR SUPERIOR TO ANY TEXAS FISH.—Yes, stewed and fried. They were splendid both ways, far superior to any Texas fish, in our estimation.—WILLIAM BRUEGGERHOFF, *Austin, Tex.*

129. GOOD AS ANY.—We have baked them and they are as good as any fish we ever ate.—J. SHAW MARGERUM, *Washington, Pa.*

130. EQUAL TO ANY FISH.—I have eaten some. They were fried and were an excellent table fish; equal to any species of fish.—WM. A. JETT, *Atlanta, Ga.*

131. EQUAL TO ANY FISH IN THE COUNTRY.—I have not, but several of my neighbors have and pronounce them equal to any fish in the country.—MONROE POINTER, *Como Depot, Ill.*

132. NICEST FISH EVER TASTED.—They are the nicest fish I ever tasted. We fried them the same as other fish.—WM. A. RIDGELY, *Glenwood, Md.*

133. FINEST FISH IN THE COUNTRY.—Have eaten none here, but plenty in Germany, and know it is the finest fish we have in our country.—WILLIAM RADAM, *Austin, Tex.*

134. NEVER ATE ANYTHING MORE DELICIOUS.—We ate the one 8 inches long, cocked with fine lard. I had visitors, and all joined in

saying they never had eaten anything more delicious. I know I never will.—JOHN HOUSTON, *Farmville, Va.*

135. MOST EXCELLENT FISH THEY EVER ATE.—I killed a dozen. My family and neighbors had them fried, and all pronounced them the most excellent of any fish they ever saw.—E. C. DICKINSON, *Rusk, Tex.*

136. A CRUCIAL TEST WITH MAGNIFICENT RESULTS.—Eight out of ten men with whom we have ever conversed about the table qualities of the German carp have affirmed that the fish was unsurpassable as an article of diet, but every now and then there comes along a ninth and tenth man who pronounces it coarse, dry, and not fit to eat. Our mind being thus unsettled on this great subject—and the present absorbing public interest in the carp culture demanding a dissipation of all doubts—we addressed a note to our old friend, Capt. A. D. Bates, of Batesburg, the pioneer of carp-raising in our county, begging that he allow us to spend a day with him and test the qualities of the carp. His reply was, "Come any day you please. Bring whomsoever you please. I shall be delighted, and you shall eat fried carp three times a day."

As regards the carp at dinner, it was in this wise: There were two dishes of them, 7 or 8 on each dish, fried. All these were in size from one to two pounds. They were fried as shad are. And certainly—and in all honesty and sincerity—we have never tasted a more delicious fish. So far from being dry, they are precisely the opposite; though as they grow older, the flesh becomes more solid. They have but few bones; the backbone and ribs, with but few besides. As we ate of the fish, the thought occurred to us that perhaps there was more in the cooking than in the fish. We intimated this thought to Mrs. Bates, who laughingly assured us that the frying process was of the very simplest, and that the fish were standing emphatically upon their own merits. In conclusion we beg to say that if our personal and individual experience of the table qualities of the German carp will be any encouragement to them in carp raising, we again affirm, without fear of successful contradiction, that the carp is an exceedingly delicious fish, and well worthy of any pains that may be bestowed upon it.—JAS. T. BACON and THOS. J. ADAMS, *Editors of the Edgefield Advertiser, Edgefield, S. C., March 29, 1883.*

III.—COMPARISONS WITH OTHER FISH—VERY GENERALLY COMPLIMENTARY.

137. GOOD; EQUAL TO BUFFALO.—Have eaten several that were fried. We consider their edible qualities good—equal to the buffalo in the Ohio River.—MATTHEW B. CARTER, *Shaker, Ohio.*

138. EQUAL TO BUFFALO.—We ate one, fried, which got caught in the ice and was killed. It was about as good as a buffalo, though if it had been fresh perhaps it would have been better.—G. W. VARNUM, *Montgomery City, Mo.*

139. EQUAL TO MULLET.—I have eaten 140 fried. I found them something like the mullet. They are very nice and sweeter than any other fish. Rather too sweet for some.—CHARLES J. RIDDLE, *Fork, Md.*

140. EQUAL TO BRANCH MULLET, OR SUCKERS.—Scale carp, first rate in quality. Leather carp, not so good, being more like the branch mullet or sucker.—BENJAMIN D. PALMER, *Sandy Spring, Md.*

141. EQUAL TO SUCKERS.—I have eaten only one. It was fried. I think it is about equal to our common sucker—fully as bony.—G. M. GALLASPY, *Decatur, Miss.*

142. EQUAL TO CATFISH.—A few days ago we ate two of the last lot, fried. They compared very well with ordinary fish—something similar to catfish.—P. PEYTON CARVER, *Mount Juliet, Tenn.*

143. EQUAL TO OTHER POND FISH.—Have not given them a fair trial, but think them equal to other lake fish.—I. A. EDMONDSON, 48 *South Calvert street, Baltimore, Md.*

144. EQUAL TO CROAKERS, MILL-ROACH, AND MUD-SHAD.—I have eaten some fried. I did not think they rated above croakers, mill-roach, or mud-shad. They had an earthy taste. I have never eaten them any other way than fried.—ANDREW REESE, *Lutherville, Md.*

145. EQUAL TO PERCH.—They eat very much like the perch that is found in our creeks and rivers.—JAMES T. BARTLET, *Trappe, Md.*

146. EQUAL TO PERCH.—Yes, they were fried and I thought them equal to our salt-water perch, which are good.—F. I. WILEY, *Charlotte Hall, Saint Mary's County, Maryland.*

147. EQUAL TO PERCH.—We have eaten some. They were fried and the flesh tasted similar to that of a perch.—GEORGE R. PARROTT, *Still Pond, Md.*

148. EQUAL TO ROCK FISH.—We have fried 12 or 15 of them and found them equal to pan rock.—JAMES BURTON, *Greenwood, Md.*

149. EQUAL TO DRUM BUT NOT TO PERCH OR BASS.—Yes, three. Two were fried and one boiled. They were eaten in the winter, and opinion was expressed that they were a good coarse fish, about equal to drum, inferior to perch or bass.—WILLIAM L. YOUNG, *Waverly, Miss.*

150. NOT EQUAL TO BASS.—Yes, very fair. They are not as good as bass. The flesh has not much flavor and is soft.—M. GILLET GILL, *Baltimore, Md.*

151. NOT EQUAL TO THE RIVER FISHES.—In April, 1882, I tasted of a baked carp weighing some 5 pounds, properly seasoned and cooked; I think it inferior to any of our running stream fishes for the table in flavor and texture.—IRA P. JONES, *Nashville, Tenn.*

152. QUITE SUPERIOR TO NATIVE FISH.—I have eaten two messes. They were fried and very fine; quite superior to our common fish.—J. C. KEITHLEY, *Shackleford, Saline County, Missouri.*

153. BETTER THAN PERCH OR CATFISH; NOT EQUAL TO BASS OR TROUT.—In June, 1882, I caught several estimated at one and a half pounds. All were returned to the water except two, which were baked

and eaten. They were considered as "good"; not so good as bass or mountain trout, but better than perch or catfish.—MATTHEW A. MILLER, *Richmond, Va.*

154. NOT EQUAL TO TROUT OR SHAD.—Yes, I had some prepared as fish generally are. My opinion is that they are the fish for the people, but not so good as the trout or shad.—C. M. COE, *Atlanta, Ga.*

155. NOT EQUAL TO TROUT.—I have eaten carp from another's pond. I liked them pretty well—not so well as trout. They were fried.—PEMBERTON WOOD, *Union Bridge, Md.*

156. NOT EQUAL TO TROUT OR PERCH.—I commenced in 1882, and have been eating on them ever since. I am getting old and could not wait any longer. We fry and stew them. They are very good, either way—not equal to the trout or perch.—M. S. FINCH, sr., *Wortham, Tex.*

157. NEXT TO TROUT AND PERCH.—Good; only surpassed by our native trout and perch.—E. L. MCGEHEE, *Woodville, Miss.*

158. BETTER THAN SUNFISH OR TROUT.—Fried, and better than the sunfish. I prefer them to the mountain trout from my pond near by or to my eastern trout bred here.—ADDISON BAKER, *Denver City, Colo.*

159. BETTER THAN RED-HORSE—NOT EQUAL TO BREEM.—One only—of the scaly variety. It was fried and pronounced fine—not equal to the bream, but better than red-horse, which it resembles.—S. W. BOOKHART, M. D., *Blythewood, S. C.*

160. EQUAL TO SHAD, RED-HORSE, BLACK BASS, OR SUCKERS.—They are equal to the shad, red-horse, black bass, white sucker, and other fish we get here.—ABEL A. WRIGHT, *Griffin, Ga.*

161. EQUAL TO ANY NATIVE FISHES.—Yes, fried. They are equal to any of our native fishes.—H. I. IRLY, *Eufaula, Ala.*

162. EQUAL TO BLACK BASS.—I think they are as good as black bass.—WM. DOWNEY, *New Market, Md.*

163. BETTER THAN BLACK BASS, ROCK OR MACKEREL—EQUAL TO SHAD.—We have, fried. We consider them equal to shad, superior to black bass, rock or mackerel, and we wish for nothing better. They are the fish for the million.—EDWIN H. REYNOLDS, *Rising Sun, Md.*

164. EQUAL TO BASS OR PERCH—SUPERIOR TO LAKE FISH.—The first one was caught about September 1, which we did not expect to be extra on account of the warm weather, but to our surprise it was excellent, and by one guest who is used to eating fish caught fresh from Lake Michigan and from different streams of this State, it was pronounced equal to the creek bass or perch, as it is sometimes called, which is considered the best fish we have, even superior to lake fish. We all thought it far better than catfish or suckers. It was not oily or coarse, as some papers have stated. Three persons besides our own family of four grown persons partook of it and all liked it. The other fish was caught in October after the weather became cooler, and four people, all different from the first party, besides our family, ate of it, the same opinion being expressed

as before. We who ate of both could see no difference, unless it was a very little more firmness to the flesh of the last.—GUSTIN HAVENS, *Lewis Centre, Ohio, April 6, 1883.*

165. NEARLY EQUAL TO RED SNAPPER.—Have eaten no carp under 2 lbs., at which weight they are an excellent pan fish, only the flesh is a little soft. An 8 pounder baked is nearly as good as a red snapper.—B. J. WILSON, *Atlanta, Ga.*

166. NOT EQUAL TO SHAD—Yes, and I do not consider them first class for eating. They will not compare with shad and other fine fish in North Carolina, waters.—H. B. WRIGHT, *Saulsbury, Tenn.*

167. NOT EQUAL TO SHAD.—Yes—they were fried as we cook her- ring and their quality was fair, but not so good as Potomac shad.—ASA M. STABLER, *Spencerville, Md.*

168. EQUAL TO SHAD.—We ate one this morning. It was broiled. It was very good—something like shad.—WM. THOMPSON, jr., *Lemont, Pa.*

169. EQUAL TO SHAD.—I have. They are first rate, about equal to boiled shad.—SAMUEL T. EARLE, *Centreville, Md.*

170. EQUAL TO SHAD.—Yes, fried; most excellent, equal to shad.—IRA A. FITZ GERALD, *Linwood, N. C.*

171. EQUAL TO SHAD.—I cooked four during last year. They were fried as we usually prepare shad, and I consider them equal to shad.—RICHARD H. CORNEGYS, *Greensborough, Md.*

172. EQUAL TO TROUT OR SHAD.—Yes, baked and fried; fresh from the water. It was equal to trout, and I think equal to shad.—Dr. H. H. CARY, *La Grange, Ga.*

173. BETTER THAN SHAD.—We have eaten two fried and consider them better than shad.—WM. B. TEWELL, *Rockhill, S. C.*

174. BETTER THAN SHAD.—Yes, baked; superior to shad.—H. G. EVANS, *Hendersonville, N. C.*

175. BETTER THAN SHAD.—Two, baked. I found them an excellent table fish—in my estimation far superior to shad.—ADOLPH J. GALL, *Jessup's, Md.*

IV.—CRITICISMS AS TO SOFTNESS OR MUDDY TASTE.

176. GOOD, BUT A LITTLE SOFT.—We have eaten some few fried. They were good. Little on the soft order.—JOS. HAYGHE, *Upper Cross Roads, Md.*

177. SOFT.—The scale carp are best. The others are too fat and soft.—SAMUEL M. SUBERS, *Macon, Ga.*

178. SOFT.—We ate two, fried in butter. They were pleasant tasted, but the flesh was most too tender.—J. W. HIGBEE, *Castle Shannon, Pa.*

179. EXCELLENT, PERHAPS SOFT.—I ate two fried. Their table qualities were excellent. The first one was a little too fat and the meat a little soft.—C. C. LOBINGIER, *Braddock, Pa.*

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180. TOO SOFT.—I do not think them a good pan fish, being too soft. They are good boiled.—ROBERT E. WITHERS, *Wytheville, Va.*

181. SOFT AND OF A MUDDY TASTE IN JULY.—Cooked in lard. I did not like them. I found them to be soft and strong in flavor. I think it was July 8th that I tasted them.—WM. SALWAY, *Superintendent of Spring Grove Cemetery, Station A, Cincinnati, Ohio.*

182. SOFT AND OF A MUDDY TASTE.—I have eaten them fried several times. I do not like them very much. They are soft and taste a little muddy.—SAMUEL ROOP, *Westminster, Md.*

183. MUDDY TASTE.—I tried to eat a 3-pound scale carp, but found it strong, with a disagreeable muddy flavor. We fried and served it with spiced sauce. Some of mine are the leather variety, and perhaps they may prove better.—THOMAS CLAPHAM, *Roslyn, N. Y.*

184. A LITTLE MUDDY TASTE.—I have eaten some fried in lard that was fat, very good except a little musty taste.—ANDREW MANN, *Forest Hill, W. Va.*

185. MUDDY TASTE DUE TO POND.—The Albright mill pond was drawn off yesterday and Mr. J. E. McKnight gave us a small carp which we had cooked. The flesh was white and rather soft. The fish does not have many bones; but this one was not of fine flavor, having a muddy taste. This, however, may be owing to the character of the pond which is a very old one filled with red mud, and very offensive.—*The Daily Bugle, Jas. W. Albright, Editor, Greensboro', N. C., May 2, 1883.*

186. CAUSE OF MUDDY TASTE.—I have eaten them both fried and broiled. I think the scale carp superior to the leather, but the quality of the carp depends upon their food. If left to care for themselves they will taste of the mud.—L. TRIPLET, jr., *Mount Jackson, Va.*

187. HOW TO AVOID MUDDY TASTE.—We ate a few last spring, fried. They tasted of mud unless they were first soaked in salt water. After being soaked over night they were very good. The meat is firm. What I used were scale carp.—Capt. JNO. T. FLETCHALL, *Poolesville, Md.*

188. SOME NOT GOOD, AND SOME VERY GOOD.—I ate 3 carp which weighed two pounds each. They were fried and I did not think much of them. The flesh was not very solid and had a sweet taste. Those eaten were in April before they had spawned, and while I and some of my family did not like them one of my neighbors, to whom I sent one, thought it very nice. These fish were some of the original lot received from you. I have this last week eaten some of the two-year olds weighing $\frac{1}{4}$ pound each and all liked them very much.—E. L. TSCHIFFELY, *Hunting Hill, Md.*

189. SOFT IN JUNE.—We baked a three-pound one taken from a very small and warm pond. We found it of good flavor, and sweet, but

very soft. It was killed late in June, and was full of roe.—LEONARD V. GREEN, *Norwich, Conn.*

190. NOT GOOD WHEN SPAWNING; OTHERWISE VERY FINE.—Only one, but about spawning season. It was strong tasted. I am assured, however, that they are very fine at other seasons, and even then if too young to spawn.—J. W. MEWBORN, *Macon, Tenn.*

191. NOT GOOD IN AUGUST; SMALL ONES VERY FAIR.—We have tried one weighing 10 pounds, and gave away others about that size. They were stuffed and baked. I think they are the poorest food-fish ever eaten. Even the smell is offensive. July 25, 1883.

The large carp I wrote about as being so offensive when cooked was served up in the month of August.

The small carp, say $\frac{1}{2}$ pound to $1\frac{1}{2}$ pounds, we catch with worms at the present time. The parties who have eaten them say they think them a very fair pan fish.—WILLIAM GRISWOLD, *Jobstown, N. J., July 30, 1883.*

192. RESULTS OF EATING CARP SOON AFTER SPAWNING TIME.—It must be remembered that the taste of mankind is so different that what would delight one would disgust another. We had a carp boiled by a German, but none of our party liked it thus cooked. The next was stuffed splendidly and baked. This was found more palatable. As a pan fish we must say that those fortunate people who know how a 13-inch freckle, such as you catch in Surrey and Sussex Counties, tastes will not take any stock in this new comer. But my opinion is that on a cold, frosty morning in October the carp will be found to be good eating, if properly cooked.—R. A. MARTIN, in the *Petersburgh, Va., Index-Appeal, August 12, 1882.*

193. DO NOT EAT CARP IN SPAWNING SEASON.—Last November one gentleman got a carp 20 inches long, and all who ate of it said it was O. K. Two others tried one, each in spawning season, and said they were not good. Of course these persons knew nothing of carp culture.—S. J. ALEXANDER, *Macon, Tenn., July 3, 1883.*

194. INFERIOR AND SICKENING AFTER TWO WEEKS' CONFINEMENT IN A RAILROAD TANK.—It was in the months of December and February that I tasted the carp. On one occasion I caught four out of my pond and put them in a railroad tank containing some 5,000 gallons of water which was changing every day or so. I put them in there, not for the purpose of changing their condition or edible qualities, but I was expecting a friend who was thinking of getting some, and I wanted him to taste them. I put them in the tank so that I could take a net and get them at any minute. But my friend did not come at the time I expected him and the carp remained in the tank over two weeks, being fed in the meantime on bread alone. This tank is a large wooden tub containing over 5,000 gallons of water. I served the carp in three different ways for the table, and in all the different ways it still retained its muddy, strong, fishy, sweet, sickening taste. Three out of four who

ate any complained of a little sickness at the stomach after eating them. After trying myself I sent a half dozen or more to friends in the village, and every one who ate them said it had the same taste to them as above. I must say I think it the most inferior fish I ever ate. I tried hard to see if I could not overcome some of my bad opinions of the fish, as I had gone to the expense of fitting up a nice pond especially for them, but facts are stubborn things. I am now stocking my pond with black bass in order that they may eat up the young carp, as I think them worthless for anything else.—COPELAND D. EPES, *Nottoway C. H., Va.*

V.—THE ONLY UNCOMPLIMENTARY REPORTS ASIDE FROM THOSE KNOWN TO BE DUE TO EATING CARP IN THE WRONG SEASON.

195. RATHER INDIFFERENT.—Have eaten several fried and considered them rather indifferent.—ROBERT M. STABLER, *Spencerville, Md.*

196. NOTHING EXTRA.—I ate two of them; I thought them nothing extra.—J. L. WOOLFOLK, *Madisonville, Ky.*

197. OPINIONS DIFFER.—Have eaten a number of them; most of persons pronounce them fine, others differ.—W. W. TUNIS & BRO., *Tunis Mills, Md.*

198. COULD NOT TELL.—We have fried and eaten two of the fish that we found in the grass with some hook holes through their mouths. Thieves had dropped them. We could not tell much about the quality.—JOHN B. BROWN, *Nashville, Ohio.*

199. UNFAVORABLE.—Opinion not in favor of carp.—JOHN COLLINS, *Bernardsville, N. J.*

200. VERY POOR.—I have. They were fried in hogs' lard. Their edible quantities were very poor.—JOSIAH PERRY, *Covington, Ga.*

201. DOES NOT LIKE THEM AT ALL.—We have eaten them several times, always fried in butter or lard, after being rolled in meal. I do not like them at all.—OSCAR REID, *Ferguson, Mo.*

202. UNFIT TO EAT.—Have eaten one and pronounced it decidedly unfit for table use.—R. PAYNE, *Georgetown, Ky.,*

203. WORTHLESS FOR EATING.—Yes, have eaten a few, baked, fried, and broiled. Their edible qualities are not good. I was very much disappointed in them. They are worthless for eating. I think it very likely that the muddy bottom of the pond causes the fish to be so indifferent for eating.—E. F. RAWORTH, *Vicksburg, Miss.*

204. TOUGH AND UNFIT TO EAT.—Our country is getting pretty thoroughly stocked with German carp, and there is hardly a paper in the land but teems with praises of their wonderful growth, loveliness, adaptability to the shallow ponds, &c., all of which we most unqualifiedly indorse; but how seldom do we hear one word as to their eating qualities. Although our esteemed senator from this district, who introduced them here three years ago, tells us they sell "side by side" with the best fish in the Washington, D. C., market, still that does not keep other

Kentuckians, at least, from having their tastes. From fifteen to twenty families around here have tried them at different times during the past year, and, except two persons who could eat them but didn't relish them, they unhesitatingly pronounced them unfit to eat. They have tried them boiled, baked, and fried, and discarded them every way. One lady says, they are well named leather carp, for we would prefer leather served in any style, to them; and, right here, might not our fish commissioners have mistaken their use, and ought we not to send a few to the tannery? Another person says he intends to keep raising them, for he knows they will prove valuable for soap grease. Such are some of their indorsements here, and we would like for others throughout the country not to think so much of them as we did, having them nearly three years before trying them, but to try them as soon as possible, and report the results.—*An anonymous Kentucky correspondent of the American Field, January 20, 1883.*

VI.—A FEW OPINIONS IN REGARD TO THE BONES.

205. VERY FREE FROM BONES.—Very much like Lake Michigan white-fish; bony at the back of the head, like shad. The remainder is very free from bones.—E. MILLER, *Mahwah, N. J.*

206. VERY FEW BONES.—Fried, it was very good—very few bones.—T. HOLT, *Holt's Summit, Mo.*

207. FINE FLAVOR, NO BONES, AND FAT.—Yes; dam broke, and those injured in catching were baked and fried. They were of fine flavor, fat, and no bones.—ED. M. GRESHAM, *Carlton's Store, Va.*

208. GOOD BUT BONY.—Yes; a good number fried and boiled. They are pronounced by all as good as any fish, excepting a few more bones than we usually find in other fish.—M. S. O'NEAL and C. G. ARNOLD, *Versailles, Ky.*

209. BONY, LIKE BUFFALO.—I dissected two or three and I found those detached bones that make the buffalo (Western Cyprinidæ) thicklip so objectionable. Otherwise it is a good fish in August and September. After that they get soft and continue to be so till after they have spawned in June.—E. Z. BUTCHER, *Solomon City, Kans.*

210. BONES IN SMALL ONES.—Yes. Fine baking fish. Small ones are rather too bony for frying, perhaps.—E. A. LINDSEY, *Jackson, Tenn.*

211. NOT FULL OF BONES NOR MUDDY.—Carp are not full of bones and do not taste of mud as some would have us think, but, on the contrary, are very free from small bones and are a most excellent table fish, to which several who have dined with me will testify.—H. B. DAVIS, *Macon, Ga.*

VII.—HINTS UPON VARIOUS WAYS OF COOKING CARP BY OTHER ADMIRERS OF THIS FISH.

212. FRIED BROWN: FIRST RATE.—Yes; we have tried them three times. We scald them the same as catfish, roll them in meal, and fry

them brown. We think they are first rate; good as we want.—A. J. and W. B. BAIRD, *Nashville, Tenn.*

213. SALTED TO REMOVE MUDDY TASTE; THEN FRIED.—They tasted of mud unless they were first soaked in salt water over night. Then fried they were very good.—Capt. JOHN T. FLETCHALL, *Poolesville, Md.*

214. SALTED AND FRIED BROWN: EXCELLENT.—We took one out of pond No. 2, in May, 1883, weighing three pounds. When scaled, salted five hours, floured, and fried brown, it was of excellent flavor.—J. W. LONG, *Mount Morris, Pa.*

215. FRIED BROWN: VERY SUPERIOR.—I have eaten one. I pronounce it splendid. It is a very superior fish when well cooked and fried brown, as a fish ought to be.—EDWARD THOMPSON, *Saint John-land, N. Y.*

216. BEST WHEN FRIED BROWN.—Some 25 or 30 persons in this vicinity have eaten them and generally pronounced them good enough. I ate two that were boiled and did not like them so well as fried and well browned. They are drier and suit my taste better.—W. E. LOGAN, *Andrews, Ohio.*

217. SPLIT AND FRIED: EXCELLENT.—We have tasted of the large size, and of the largest size of young ones. We had them fried. The large size were split before frying, and pronounced by my family and friends that helped to eat them excellent.—BENJAMIN G. CISSEL, *Highland, Md.*

218. SPLIT AND FRIED: NEVER ATE BETTER.—I have. They 1 to 2 pounds carp were split open and fried, and the opinion of every one is that they never ate better fish. Mine are of the scaly variety.—P. G. POWELL, *Versailles, Ky.*

219. FRIED IN BUTTER: NICE.—We have eaten one; cleaned it in the evening, salted it, and fried it in butter; thought it good and nice.—WM. SADLER, *New Salem, W. Va.*

220. FRIED IN BUTTER AND LARD.—Of the very finest. One, which was rolled in wheat flour and fried in butter and lard. Their eatable qualities were of the very finest.—BENJAMIN L. GARBER, *Marietta, Pa.*

221. FRIED IN LARD: EXCEEDINGLY GOOD.—Last October we ate two of the smaller ones. They were fried in lard, as fresh fish are often cooked, and all who tasted them pronounced them exceedingly good.—DAVID SCOTT, *Elkton, Md.*

222. FRIED IN LARD AND OIL.—Yes, sir; fried in lard and cottonseed oil; we prefer the oil. We think they are a very fine fish and very sweet.—E. B. PLUNKET, *Atlanta, Ga.*

223. SLICED AND FRIED WITH EGGS AND CRUMBS.—The only one eaten was cut into steaks, dipped into egg and bread crumbs, and fried. The quality was good.—JOHN PICKERING, *Fontana, Kans.*

224. FRIED AND BOILED: GOOD.—We have eaten and presented to our neighbors about 100, and all regard their edible quality good.

We fry them and boil them same as rock fish.—JOHN S. DALLAM, *Beth Air, Md.*

225. BROILED: FIRST RATE.—Yes; broiled, with butter and pepper, they are first rate.—SAMUEL T. EARLE, *Centreville, Md.*

226. BROILED WITH LEMON SAUCE: DELICIOUS.—Yes; broiled, with lemon sauce, and baked, they are delicious.—P. H. COLEMAN, *Union Springs, Ala.*

227. BAKED OR FRIED.—Last fall we ate two mirror carp, and the 7th of August, 1883, two weighing 4 pounds and one ounce. One was stuffed and roasted, the other fried. A. Stout, Dr. Terry, S. Sharp, John Bidger, and others join me in saying they are the best they ever tasted. About twenty persons tried them on my fifty-sixth birthday.—Dr. SETH G. BIGELOW, *Silver Lake, Ind.*

228. SKIN, AND FRY OR BAKE THEM.—We first skin them, then thoroughly scald them and either fry or bake them.—O. A. GILMAN, *Paris, Ky.*

229. EATS THEM VARIOUS WAYS.—I have eaten them abroad in various styles of cooking, but have eaten none of mine.—DANIEL C. BIRDSALL, *Westport, Conn.*

230. ALL WAYS: VERY EDIBLE; SCALE-CARP BEST.—I have eaten quite a number fried, baked, stewed, and boiled. When properly prepared they are very edible.—SAMUEL M. SUBERS, *Macon, Ga.*

231. ALL WAYS: EQUAL TO SHAD.—Baked, boiled, stuffed, fried, served on rice, eggs, toast, &c., they are equal to shad.—ABEL A. WRIGHT, *Griffin, Ga.*

232. ALL WAYS, BUT LARGE ONES ARE BEST BOILED.—Yes; boiled baked, boiled, and fried. They are best boiled when large.—BENJAMIN D. PALMER, *Sandy Springs, Md.*

233. PREFERS THEM BOILED.—Have been eating them all summer, broiled, fried, and boiled. Boiled is thought the best with us and by others that have eaten them.—Capt. E. HERMAN, jr., *Towson, Md.*

234. BOILED LIKE ROCK: GOOD.—Yes; fried and boiled. The larger carp boiled and served as rock are served is palatable and good.—ROBERT E. WITHERS, *Wytheville, Va.*

235. A GERMAN METHOD.—It was with no common pleasure that we were called on to witness the preparations for an original and savory meal, which the forester of Max von dem Borne [of Berneuchen, Germany] cooked with consummate skill, closely following the method employed by the North American trappers and sportsmen during their camp-life in the vast forests of the Western Hemisphere. Four plump carp were cleaned, washed, well strewed with salt and pepper both on the inside and the outside, and thereupon wrapped—each one separately—in a white sheet of paper well buttered. Round this a sheet of newspaper was wrapped, the package was for a few moments dipped in cold water, and finally placed on a bed of hot coals of an open fire. Above the four carp came a layer of raw potatoes, which were thus baked in

the ashes. In about half an hour the "pepper carps" were ready for the table. Full of their own juice, they formed a most tempting and delicious dish, and being handed round, together with potatoes, on large napkins, satisfied even the most epicurean taste. [From the *Magdeburgische Zeitung*, No. 501, Magdeburg, October 27, 1881.]

236. GERMAN METHOD OF COOKING.—Yes; many a one in Germany. When young, say 2 to 3 pounds, they will do to fry; but when they weigh 10 to 50 pounds they are generally stewed in water first, afterwards in a gravy made of brown bread, a small portion of sugar or of molasses is added, and then they put in enough of brown beer to make gravy sufficient to cover the fish and also according to the size of the family.—LEO WELTZ, *Wilmington, Ohio*.

237. BOILED IN BEER: DELICIOUS.—Yes, sir; they were boiled in beer after the Saxon fashion (not lager beer, however, but what is called common beer). They were delicious.—HUGO MULERTT, *Cincinnati, Ohio*.

238. WINE METHOD OF COOKING.—I have eaten carp and find them good. One specimen of 5 pounds and two years old, taken from a pond on Long Island, was cooked as follows: First boiled in white wine for 15 minutes and then baked in an oven and served with a white-wine sauce. It was eaten by a number of epicures, and by all pronounced a fine table-fish.—EUGENE G. BLACKFORD, *Fulton Market, New York, N. Y.*

239. PARTLY BOILED AND PARTLY BAKED: FIT FOR A KING.—I always instruct the cook to clean them nicely; then wrap the fish in a linen towel, have a large kettle of water boiling, coil the fish neatly in the kettle and boil fifteen minutes, then turn off the water, remove to a baking pan without marring and put in the oven, bake and then baste with butter gravy. A nice dressing could occupy the interior of the fish and the space around the sides. If properly done it makes a dish fit for a king or a hungry fisherman.—W. VAN ANTWERP, *Mount Sterling, Montgomery County, Ky., October 31, 1882*.

240. SKINNED, DIPPED, AND FRIED: EXCELLENT.—The carp we caught from our pond last September to eat were skinned when dressed, cut into pieces of suitable size, dipped in flour, and fried. It was excellent.—GUSTIN HAVENS, *Lewis Centre, Ohio*.

241. BOILED; BUTTER GRAVY: RESEMBLED LOBSTER.—I ate but one carp, which was boiled and served with a butter gravy. A friend, who was taking dinner with me, as well as myself, pronounced, it "very good indeed" although different from any other fish, with a faint resemblance to lobster in taste. It is, however, not impossible that we both were prejudiced in favor of carp.—A. RAHT, *South Cottonwood, Salt Lake County, Utah, Feb. 9, 1883*.

242. AN EXCELLENT RECEIPT FOR FRYING CARP.—Be sure to clean the fish thoroughly. Remove the fat from the inside. Place the fish in a weak brine over night. Wipe it thoroughly dry and cover it with flour or meal. Have the fat boiling hot and do not put the fish in until it is boiling. Fry quickly, and brown as you like to have it.—Prof. E. T. COX, *New Harmony, Ind.*

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**53.—THE SPAWNING OF BLUEFISH—AN OPINION OF THE CAUSE OF
MORTALITY OF FISH IN THE GULF OF MEXICO.**

By H. D. PIERCE.

[From a letter to Prof. S. F. Baird.]

I have repeatedly taken bluefish in Lake Worth, Florida, also at Jupiter Inlet, fully ripe and ready for spawning, in the month of January. In April, I have seen great numbers of young bluefish at the south end of Lake Worth. This is a salt-water lake, with no fresh water flowing into it of any account, and the only lake of the kind on the Florida coast. I have no doubt that it will be found that the bluefish spawn all along the Florida coast.

I do not believe the theory that the occasional mortality of the fish of the coast is caused by poisonous water coming from the Everglades. If the water in which these dead fish were found had been tested with a thermometer the reason would probably have been found. I once tried it by immersion and succeeded in giving myself the worst chill I ever had. The next day, for a distance of four miles, there were thousands of fish on the beach all floating in the water. All were what we call bottom or rock fish with one exception, the flying fish, of which a great many were killed. This was in the month of July, when there was no fresh water coming out of the Everglades within 60 miles of where the fish were found.

BISCAYNE BAY LIFE SAVING STATION,
Miami, Fla., August 31, 1883.