

[7]

307-08

ORDINARY, MS.

Public DEPARTMENT.
G.O., DATED 23-2-91
No. 139

INDEXED.

When given for copying

[Despatch Abstract.]

Govt of India
review of the reports
measures adopted
the destruction of
wild animals and
venomous snakes

Pub. Cuo. 495

28TH JANUARY 1891, No. 59, REVENUE.

GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

READ—the following extract from the Proceedings of the Government of India in the Home Department (Public),—under date Calcutta, the 4th December 1890, No. 40-Pub.—2374-2385:—

Read—

Home Department Resolution No. 28—1579-1595, dated 15th July 1887.

Do. do. No. 61—2635-46, dated 22nd November 1887.

Despatch from Her Majesty's Secretary of State for India, No. 5 (Public), dated 9th January 1890.

Home Department Circular to Local Governments and Administrations, No. 9—554-563, dated 8th March 1890.

Read—also the following letters from Local Governments and Administrations, reporting on mortality among human beings and cattle from injuries received from wild animals and venomous snakes, and the results of the measures adopted for exterminating wild animals and poisonous snakes in British India during the year 1889:—

From the Government of Madras, No. 430, dated the 12th June 1890, and enclosures.

From the Government of Bombay, No. 3201, dated 12th August 1890, and enclosures.

From the Government of Bengal, No. J-W—2-28, dated 16th September 1890, and enclosures.

From the Government of the North-Western Provinces and Oudh, No. 1236-III—201-214, dated 8th September 1890, and enclosures.

From the Government of the Punjab, No. 542, dated 28th April 1890, and enclosures.

From the Chief Commissioner, Central Provinces, No. 2335—144, dated 22nd April 1890, and enclosures.

From the Chief Commissioner of Burma, No. 223—107 N., dated 11th April 1890, and enclosures.

From the Chief Commissioner of Assam, No. 2970 G., dated 30th April 1890, and enclosures.

From the Chief Commissioner of Coorg, No. 543—4555, dated 19th April 1890, and enclosures.

From the Resident at Hyderabad, No. 229 G., dated 19th July 1890, and enclosures.

From the Chief Commissioner of Ajmere-Merwara, No. 141, dated 8th February 1890, and enclosure.

From the Resident in Mysore, No. 169—236, dated 22nd January 1890, and enclosure.

Resolution.—With the object of reducing the bulk and number of the annual reports which are submitted to the Government of India, it was decided in Home Department Resolution No. 28—1579-95, dated the 15th July 1887, that, among others, the report regarding the destruction of wild animals and venomous snakes should be submitted triennially, and that in the intermediate years it would be sufficient to send statistics with brief notes. In consequence of this decision the Government of India issued no general Resolutions on the statistics for the years 1887 and 1888 recording the mortality from wild animals and snakes, but merely published them for general information. But recently, in view of the great mortality from snake-bite, the Secretary of State has expressed a wish that the annual reviews of the Government of India should be continued, and has inquired whether, in the opinion of the Governor-General in Council, any further measures can be taken to lessen the mortality caused by venomous snakes. In the circular letter of 8th March 1890, Local Governments and Administrations were asked to give in their reports for 1889 a brief account of the measures taken in recent years to reduce the mortality from snake-bite, and to state whether any further special action is necessary or possible.

* * * *

3. The mortality in 1889, both of human beings and cattle, was greater than in 1886, the last year the statistics for which were reviewed: it was greater of human beings than in 1887 or 1888, but less of cattle than in 1888. The number of wild beasts destroyed in 1889 was, except in the case of leopards, less than in 1886; it was considerably less in the case of tigers than in any of the previous three years, and much less in the case of wolves, the animals which are, next to tigers, most destructive of human life. Fewer animals of every kind, except hyenas, which are the least harmful of the larger carnivora, were killed in 1889 than in 1888. While, however, 417,596 snakes only were reported to have been killed in 1886, the figure in 1887 was 511,861, in 1888, 571,381, and in 1889, 577,770.

The number of licenses issued under the Indian Arms Act, 1878, for the purposes of destruction of wild animals or protection of crops, was shown in 1886 as 86,859, in 1887 as 71,423, in 1888 as 60,111, and in 1889 as 61,083, but the returns for the earlier of these years are not reliable.

4. A survey of the statistics from 1879 to 1889 shows that the number of human beings killed by wild animals has, during that period, amounted to 29,936, or on an average to 2,720 annually. The average number killed in each year in each Province was as follows:—

Madras	...	...	...	...	...	...	...	...	230
Bombay	...	...	...	...	...	...	...	...	101
Bengal	...	...	...	...	...	...	...	...	1,437
North-Western Provinces and Oudh	...	...	...	...	...	...	...	...	375
Punjab	...	...	...	...	...	...	...	...	45
Central Provinces	...	...	...	...	...	...	...	...	274
Burma	...	...	...	...	...	...	...	...	31
Assam	...	...	...	...	...	...	...	...	197
Coorg	...	...	...	...	...	...	...	...	2
Berar	...	...	...	...	...	...	...	...	23
Ajmere	...	...	...	...	...	...	...	...	5
Total ...									2,720

During the same period Rs. 14,56,994 have been expended in rewards for the destruction of the following wild animals:—

Tigers	...	...	...	...	...	...	...	...	17,885
Leopards	...	...	...	...	...	...	...	...	44,464
Bears	...	...	...	...	...	...	...	...	16,216
Wolves	...	...	...	...	...	...	...	...	61,404
Hyenas	...	...	...	...	...	...	...	...	15,976

In spite of this large destruction of the more dangerous wild animals, the number of persons reported to have been killed by animals in 1889 (2,724) is almost exactly the average of the previous ten years, while the number of cattle reported to have been killed in that year (65,757) is considerably above the recorded average for the previous ten years (52,247). While, however, the aggregate number of persons killed by wild animals appears when considered by itself to be large, it must be remembered that the proportion of the population who meet their deaths in this manner is relatively very small. This is illustrated by the following figures, which show for each province the rate per mille of the population of deaths caused by injuries from wild animals in 1889:—

Madras	...	...	...	...	...	...	...	...	006
Bombay	...	...	...	...	...	...	...	...	004
Bengal	...	...	...	...	...	...	...	...	02
North-Western Provinces and Oudh	...	...	...	...	...	...	...	...	006
Punjab	...	...	...	...	...	...	...	...	001
Central Provinces	...	...	...	...	...	...	...	...	03
Lower Burma	...	...	...	...	...	...	...	...	01
Assam	...	...	...	...	...	...	...	...	03
Coorg	...	...	...	...	...	...	...	...	01
Berar	...	...	...	...	...	...	...	...	01

If the mortality be calculated on the population of British India recorded in 1881, it will be found that one person out of every 72,882 of the population was killed by wild animals during 1889.

5. The mortality from snake-bite is far greater. Large numbers of the deaths reported to have resulted from this cause occur at a distance from the district headquarters under circumstances which render it impossible to feel certainty that the cause of death has been correctly reported; but even when allowance has been made for deaths incorrectly or improperly attributed to snake-bite, there remains a large residuum of cases undoubtedly due to it. The aggregate mortality recorded during the last eleven years in British India is 219,367, and the average mortality a year almost exactly 20,000. The average mortality between 1879 and 1888 compares thus in each Province with that for 1889:—

	Average.	1889.	Excess of 1889.	Deficit of 1889.
Madras	1,245	1,587	342	...
Bombay	1,101	1,080	...	21
Bengal	9,538	10,681	1,143	...
North-Western Provinces and Oudh	5,420	6,445	1,025	...
Punjab	811	915	104	...
Central Provinces	966	1,063	97	...
Burma	166	208	42	...
Assam	201	230	29	...
Coorg	7	1	3	...
Berar	185	216	31	...
Ajmere	52	53	1	...

The recorded mortality from snake-bite thus tends to increase, though it is uncertain how far the increase is due merely to better reporting in recent years: it is most serious in Bengal and the North-Western Provinces and Oudh.

6. Continued attention has for many years past been directed by the Government of India and Local Governments to devising measures for reducing mortality from snake-bite, and various plans have been given a trial from time to time, but without any substantial success. In 1877, the Government of India observed that deaths from snake-bite occur mostly in and about human habitations, and that it was obviously useless to pay large rewards to professional snake-catchers who catch snakes in the jungles and bring them into head-quarters. It was considered that rewards might with much advantage be given in towns and large villages with or without help from Local Governments, and rewards have for some years been generally granted on this principle in every Province except Madras. In 1881, the Chief Commissioner of Burma suggested for that Province a plan for organizing village snake-hunts in the rice-plains and granting a reward regulated according to the number of houses in the village to every village that successfully carried out a hunt, but it met with little success. In 1882, the Government of the North-Western Provinces and Oudh directed a trial of the experiment of enlisting in order to kill snakes a number of snake-hunters from among the classes (Kanjars, Musahirs, Naths, and others) who make a practice of trapping reptiles and small animals for food and other purposes. It was arranged that these men should receive a small retaining fee each month and an additional reward for each venomous snake in excess of a certain number destroyed by each man in any month. This system did not prove successful in the North-Western Provinces, as the hunters employed did little or nothing to destroy snakes and were suspected of breeding them for the sake of the reward, and a similar experiment tried in Bombay in 1884 was equally unsuccessful. It could not be tried in Bengal, the province in which snakes are most destructive, because it contains no indigenous tribes of snake-catchers, and it was anticipated that if men were imported for the purpose they would suffer from the climate, especially during the rainy season, which is the best time for killing snakes. In certain parts of Bengal it was, however, found possible to stimulate in some measure the destruction of snakes by authorizing the payment of rewards:

by indigo planters in the interior of districts, but this plan has only been feasible over small areas. During a period of eleven years, the sum of Rs. 2,37,000 has been expended in the different provinces on the destruction of snakes, with what the Government of India regret to say must be regarded as no practical result, and the evidence shows that in some parts of the country at any rate the grant of rewards for dead snakes has resulted in people taking to the practice of breeding them.

7. The Government of India have, in consultation with Local Governments and Administrations, recently had under examination the question whether it might not be possible to organize some better means for the destruction of wild animals and snakes, and have considered whether the establishment of a Government organization for the purpose of destroying wild beasts would be likely to be advantageous. An experiment of this kind was attempted in Madras some years ago, but it was found to involve great expenditure, and the results achieved would certainly not justify the plan being tried elsewhere. Moreover, the larger carnivora are not gregarious, nor are they very numerous, and the adoption of any such system would inevitably end in causing the existing agency for destroying them to disappear. The Governor-General in Council has for these reasons determined to maintain the system now generally in force of granting rewards for the destruction of wild animals. His Excellency in Council, however, desires that particular attention should be paid to the following points, viz. :—

- (1) all possible facilities, consistent with due precautions against fraud, should be afforded to those who kill wild animals for obtaining the authorized rewards:
- (2) shooting parties, which engage to submit to the required precautions against injury to the forests, should be encouraged for the destruction of tigers and other dangerous carnivora in reserved forests: and
- (3) licenses under the Arms Act should be granted freely to agriculturists located in the neighbourhood of forests and jungles for the protection of themselves and their cattle against wild beasts.

His Excellency in Council also thinks that more liberality might be shown in the offer of rewards for the slaughter of man-eating tigers. The destruction of one tiger which has taken to man-eating is of much more importance than that of a number of ordinary tigers, and the difficulty and expense involved in killing such animals are ordinarily very great. Native shikaris are often, owing to the inferior quality of their weapons, unable to hunt such animals, which again can often only be dislodged from the positions they take up by beaters who require to be liberally paid. It appears to the Governor-General in Council that the offer of rewards sufficiently liberal to cover their expenses would often induce military officers and others who have leisure at certain times of the year to organize parties with the object of disposing of advertised man-eaters, provided that they were assured of assistance from the local authorities, and His Excellency in Council would therefore advocate the offer in the case of man-eaters of large rewards together with the proffer of assistance in the way of elephants and other arrangements on the part of the district and forest officials. It appears to the Government of India that if prompt action were taken by measures such as these to secure the destruction of man-eating tigers before they have had time to do much damage, the mortality from wild animals, more than one-third of which is caused by tigers, might be reduced in some sensible degree. These observations apply also to the somewhat rare cases in which leopards take to man-eating. Wolves at times become very destructive in particular localities, and in such cases it would be profitable to entertain native hunters on liberal terms for the express purpose of exterminating packs that have made themselves dangerous. Under the present system of granting rewards the Government of India have reason to apprehend that rewards are not unfrequently given, especially in the case of cubs, for jackals which are represented to be wolves.

8. It has been shown above that the system hitherto adopted of granting rewards for the destruction of snakes has effected no reduction in the mortality from snake-bite. This mortality is, the Government of India regret, lamentably large, but it is

not always realized that, large as it is, it will not bear comparison with the mortality from some forms of disease, in the reduction of which much more tangible results can be secured by the expenditure of money. In the following table the death rate in 1889 from fevers and snake-bite is contrasted for each Province :—

							Rate per mille of deaths from fever.	Rate per mille of deaths from snake-bite.
Madras	...	...	...	...	...	...	8.2	.05
Bombay	...	...	...	...	...	...	21.08	.06
Bengal	...	...	...	...	...	...	16.72	.16
North-Western Provinces and Oudh	...	...	...	...	...	...	23.10	.14
Punjab	...	...	...	...	...	...	22.75	.04
Central Provinces	...	...	...	...	...	...	23.03	.108
Lower Burma	...	...	...	...	...	...	8.30	.05
Assam	...	...	...	...	...	...	16.15	.04
Coorg	...	...	...	...	...	...	18.35	.005
Berar	...	...	...	...	...	...	17.9	.08

The inquiries recently made have satisfied the Government of India that no system of granting rewards for the destruction of snakes is likely to have any appreciable effect on the mortality from snake-bite. Snakes exist in such numbers that it is hopeless to expect to exterminate them, and there can be no reasonable doubt that large numbers of those for which rewards have actually been paid have been really harmless snakes. No satisfactory means exist in most parts of the country for ascertaining whether a snake for which a reward is demanded is really venomous or harmless, for the native officials in the interior of a district rarely know the difference themselves, while a villager who has killed a snake does not think it worth while to take it into head-quarters in order to obtain the small reward offered, even when the distance from head-quarters is not so great as to render it impossible to get the snake there before it has decomposed. If the rewards for killing snakes are raised to an amount which renders people willing to claim them, snake-hunters immediately begin to breed snakes in order to secure for themselves a livelihood. Moreover, so long as the people persist in walking in the dark with bare feet near their houses, where the same undergrowth, debris, and filth, which are the hot-beds of disease, provide cover in which venomous snakes can live and breed, deaths from snake-bite must continue to be numerous, for it is in such places that snakes are most dangerous, and not in the jungles where, though they exist in immense numbers, they can keep out of the way of human beings. The Governor-General in Council is of opinion that the most effective way of reducing mortality from snake-bite is to destroy the cover afforded for snakes in or near villages, and it is the wish of His Excellency in Council that the utmost pressure that can be legitimately placed on Municipal Committees and Heads of villages should be brought to bear to induce them to clear such places, and to keep them clear. The Government of India do not believe that any general injunctions will produce much effect, and a system of exhibiting the statistics in totals and averages only serves to conceal the places most in fault. The Governor-General in Council would therefore be glad if Local Governments and Administrations would direct Sub-divisional Officers and Tahsildars to find out and attack those villages within their respective jurisdictions which show the greatest number of deaths from snake-bite, and insist on these officers paying personal attention to the organized cleansing of the surroundings of such places and reporting how these organized measures affect the mortality from snake-bite. If such a system were carried on year by year, the worst neighbourhoods should, the Government of India think, be in time appreciably relieved, and it would be interesting if the reports showed to what extent the destruction of venomous snakes and their eggs is carried out simultaneously with the cleansing of the villages, and how the removal of undergrowth or filth affects the mortality from cholera, fever, and other diseases, as well as from snake-bite. This aspect of the question should be brought to the notice of the officers of the Sanitary Department, and the supervision of the necessary measures might be made over to the Sanitary Board in each Province. The Governor-General in Council will leave it to Local Governments and Administrations to decide whether the system of granting money rewards for snakes shall be

continued or not. Though the system has generally been unsuccessful, it may be desirable to retain it in some places where, as in some parts of Bengal, indigo planters have given their assistance in order to secure the payment of rewards only for venomous snakes, and if copies of the plates showing such snakes in Sir J. Fayrer's book on the *Thanatophidia* of India are kept at the head-quarters of tahsildars and at police stations and outposts, as has been arranged in the Punjab, the risk of rewards being paid for snakes which are not really venomous will be to some extent reduced.

9. The orders contained in clause (ii), paragraph 5, of Home Department Resolution No. ²⁸1579-95, dated the 15th July 1887, so far as they direct the submission of the reports on the results of the measures adopted for exterminating wild animals and poisonous snakes triennially are, in accordance with the desire of Her Majesty's Secretary of State for India, hereby rescinded. Local Governments and Administrations are accordingly requested to submit full reports on this subject and to review the results at length yearly, as was the practice prior to the issue of the orders in the Resolution of 15th July 1887.

Order.—Ordered that this Resolution be forwarded to Local Governments and Administrations for information and guidance, and that it be published in the *Gazette of India* for general information.

Also that a copy be communicated to the Foreign Department.

(True Extract.)

(Signed) C. J. LYALL,
Offg. Secy. to the Govt. of India.

To the Secretary to the Government of Madras.

READ—the following letter from the Chief Secretary to Government, North-Western Provinces and Oudh, to the Chief Secretary to the Government of Madras, dated Allahabad, 16th December 1890, No. 1642-III—994-A of 1890:—

Under instructions received from the Government of India in the Home Department in their letter No. 2411, dated the 6th instant, I am directed to forward, for the information of His Excellency the Governor of Madras in Council, three copies of a memorandum on the method of discriminating between the heads of wolves as distinguished from jackals and foxes.

ENCLOSURES.

From R. D. SPEDDING, Esq., Commissioner, Rae Bareilly Division, to the Secretary to Government, North-Western Provinces and Oudh, dated the 14th June 1890, No. 1207.

I have the honor to submit, for information and orders of His Honor the Lieutenant-Governor, North-Western Provinces and Chief Commissioner of Oudh, copy of letter No. 172, dated 27th ultimo, from the Curator of Provincial Museum, Lucknow, to Deputy Commissioner of Rae Bareilly, received with Deputy Commissioner's No. 1278, dated 11th idem.

2. The letter contains some most useful instructions and hints regarding a very difficult subject, viz., the method of discriminating between the heads of wolves as distinguished from jackals and foxes. There are strong reasons to suspect that Kanjars and others in claiming rewards for wolves frequently try to impose on Magistrates by substituting jackal and fox cubs.

3. The Deputy Commissioner suggests that the letter should be printed and circulated to all District Officers, and in this suggestion I concur. The letter might also with advantage be translated.

From DR. A. FUHRER, Ph.D., Curator, Provincial Museum, Lucknow, to the Deputy Commissioner, Rae Bareilly, dated Lucknow, the 27th May 1890, No. 172.

In acknowledging your letter No. 1113, dated the 23rd May 1890, I have the honor to inform you that, owing to the disfigured state of the three heads sent for examination, I am unable to express a positive opinion as to whether the heads sent are heads of wolf or jackal

cubs. The following diagnostic characters of the various kinds of cubs may be of some advantage in settling the case:—

(a) *Wolves*.—Breeding season from about the middle of October to about the end of December.

When very young, with closed eyes and ears, their general superficial color is sooty brown, with an under color, that is, at the root of hairs, of dirty tan. The latter is more apparent on the head and flanks, while the sootiness is more decided on the under part of the body. They have a milky white chest spot, varying from a few hairs to a largish patch; the ears are drooping.

When the eyes of young wolves are open and they begin to crawl about the third week, their general color is a dirty tan washed with soot.

As they grow, the ears become erect, the general color becomes a uniform light tan, with only the tips of the hairs dark, the tail being the darkest part of the animal. After the sixth week or so the white chest spot merges into the fawn color of the remainder of the chest, and a dark collar on the under part of the neck becomes visible.

This collar looks as if dark grey ashes were brushed across the grey white of the neck. But it disappears again, as the wolf gains his adult coloring, and merges into the uniform creamy white of the neck and chest.

(b) *Jackals*.—Breeding season from about the middle of March to middle of April. When quite young, with closed eyes, they are of a sooty brown, sprinkled all over with greyish hairs. Their coat is somewhat harsh. The lower part of their abdomen is bare. Their tail compared to their body is short. As they grow, a tan spot is developed in front of each ear. Afterwards a good deal of tan appears about their heads and legs and their color becomes lighter, and their coat softer, but it is spare and never so full as that of a young wolf. The grey tips of the hairs are very distinct, especially in certain lights. As they grow older, they become still lighter in color, and the sootiness is confined to the tips of the hairs. Their appearance is then as if they had been rolling themselves among charcoal, viz., a ground color of yellowish tan, washed with soot. Their teeth are neither fine nor stout. When about a month old, their general character, smallness of limbs and head should render it easy to distinguish them from wolf cubs, especially when the season is taken into consideration. Should any very young and hairless cubs be brought, it is a sign they have been cut out of the mother, and then, unless they bring the mother also, it is a sure sign they are not wolves: as if they captured a pregnant wolf, they certainly would bring her to claim a reward for her. It is my firm impression that by far the largest proportion of cubs for which "Kanjars" claim reward are jackals.

(c) *Foxes*.—Breeding season from about middle of February to middle of March. When quite young, with closed eyes, they are of a very light brown, somewhat of the shade of coffee and milk, darker on the back. Their coat is soft, and the tail compared to their body is very long, almost twice as long as that of the young jackal of the same age. When older their color becomes lighter, being only slightly dark on the back. The lower part of their abdomen becomes completely covered with a short and soft white down and their ears become white edged.

Still older their coat becomes very soft and of a yellowish tan, with numerous projecting silky black hairs. At this period on their paws (that part which corresponds to the anatomical wrist) are developed a few white hairs, and their face becomes quite foxy, with a pointed muzzle.

Their teeth are fine.

2. The three heads are returned by Bhagwan Din, Mail Contractor.

No. 900-III—994A-2 of 1890.

GENERAL DEPARTMENT.

Dated Naini Tal, the 3rd July 1890.

Copy (with copy of enclosure) forwarded to all Commissioners of Divisions in the North-Western Provinces and Oudh, for information and guidance.

No. 901-III—994A-3.

Copy (with copy of enclosure) also forwarded to all District Officers, North-Western Provinces and Oudh, for information and guidance, with the remark that vernacular copies of the letter from the Curator of the Provincial Museum, Lucknow, will be forwarded hereafter for distribution among thánas and tahsils.

(By order, &c.)

(Signed) E. F. L. WINTER,
Under Secretary to Government,
North-Western Provinces and Oudh.

ORDER—dated 28th January 1891, No. 59, Revenue.

Miscellaneous.

Communicated to the Commissioners
of Land Revenue. The instructions of
the Government of India in paragraphs 7,

8 and 9 of the above Resolution should be carefully attended to. The Board will issue the necessary orders to District Officers regarding the treatment of villages, which show a heavy mortality from snake-bite. Orders will also issue in the Local and Municipal Department, with reference to the remarks of the Government of India in paragraph 8.

2. As regards the second of the papers read above, the Government observes that under G.O., No. 85, dated 29th January 1890, rewards for the destruction of wolves have been discontinued.

(True Extract.)


Secretary to Government.

To the Commissioners of Land Revenue.
„ the Local and Municipal Department.
„ the Judicial Department.
„ the Public Department.

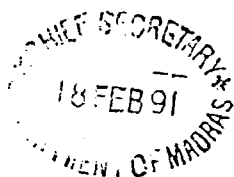
Exd. G. A. Lewis.

60 Copies.

End 495

4/3/90 R 42283 Jnd

Gobt. of {1891} Madras.
REVENUE.



C.S.
mis

Order 20-Feb 91/139

Retained.

21 Feb

Singem General

23/2

21/2

Issued

Recd.

Encl.

G.O., 28th January 1891, No. 59.

JANUARY.

Mortality from Snake-bite

Resolution of the Government of India reviewing the reports on the measures adopted for the destruction of wild animals and venomous snakes, communicated to the Commissioners of Land Revenue with the request that the necessary orders may be issued to District Officers regarding the treatment of villages which show a heavy —.

20.

BACK PAPER, No.

OF 18

FURTHER PAPER, No.

OF 18

READ AGAIN ORDER OF GOVERNMENT, DATED
18 No. MISCELLANEOUS.

ENCLOSURES.

CURRENT No.

STATEMENT WITH DITTO.

ORDER OF GOVERNMENT.

STATEMENT WITH DITTO.

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH
IN ORIGINAL (not paged).

N.B.—

- A = Copy in full.
- B = Not to be copied.
- F = Copy abstract only.
- Q = Copy heading only.

A A