MARK SCHEME for the May/June 2013 series

1123 ENGLISH LANGUAGE

1123/22   Paper 2 (Reading), maximum raw mark 50

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

1 (a) Why the panda is an endangered species and what is being done to protect it.

Mark	Expected Answer	Allow	Don't Allow
1 mark for each correct point up to a max. of 15	1. target of poachers		
	2. Habitat destroyed for agriculture / by deforestation	Farming	
	3. Habitat destroyed for housing (after population explosion)	For points 2, 3 & 5 allow habitat used / taken / cleared / removed	
	4. (pandas / wildlife) Killed / hunted (for food) in time of <u>famine</u>		For points 2, 3 & 5 _Land_ alone = 0
	5. Habitat destroyed to make way for industrial development	territory / their land / panda land	
	6. Habitat <u>fragmented/ broken up</u> by roads / railways / infrastructure	divided	_Damaged, destroyed, used_ etc
	7. Need /eat a lot of / a kilo a day of bamboo // difficult to get enough bamboo / large amounts of bamboo	'staple' diet' for 'bamboo'	_Food_ alone = 0
	8. Fewer types of / less bamboo available as habitat disappears / is encroached upon	lift of lines 20–22 As their habitat is encroached…available to them	_They are forced to move higher and higher_ alone = 0
	9. (Females / pandas / they) produce only a few cubs / few cubs / not many cubs (in lifetime)		_A few cubs_ alone = 0
	10. not keen to breed in captivity	don't breed etc.	_Can't breed_ = 0
	11. Inexperience / lack of knowledge among staff in (nature) <u>reserves</u>		
	12. Conservation is expensive / conservation is hindered by economics	keeping / raising pandas / them	_Elephant example_ alone = 0
	13. Conservation reserves set up	There were 13 reserves and now there are 40	
	14. Number of reserves is increasing	Limit ownership of guns to prevent poaching	
	15. Gun laws / gun control to prevent <u>poaching</u> / <u>hunting</u>		

16. People living on <u>reserves</u> removed	Territory reserved for them	*People living in panda habitat* = 0 *Territory* alone = 0
17. (WWF / Conservation organisation[s]) <u>work</u> / <u>campaign</u> to increase panda habitat / territory under <u>legal protection</u>		
18. (WWF / conservation organisation[s]) <u>work</u> / <u>campaign</u> for (creation of) corridors to link isolated pandas		*(Experienced and trained) personnel* alone = 0
19. Patrols established against poaching / hunting / <u>illegal</u> deforestation		
20. (Some) zoos borrow pandas to raise awareness about panda's plight / educate visitors about panda's plight		If point 20 is not attempted, do not allow point 21 without reference to <u>loan</u> fee
21. (Some) zoos pay a (loan) fee only if it / some of it / half of it is spent on panda conservation		
22. Panda used as a logo		

Additional information

If content point is made in the wrong box, do not award the mark.

Accept own words or lifting.

Accept sentences or note form.

Points 1 and 13 are already given.

If script is <u>entirely</u> verbatim lift give 0.
If more than one content point appears under a single bullet point, award each content point separately if clearly made.
If content point being made depends on information contained in another bullet point, withhold the mark unless a clear link is made between the two points. The following example would gain 2 marks:

- WWF works to protect pandas
- It / and works to create corridors to link isolated pandas

However, the following example would gain only the first mark:

- WWF works to protect pandas
- Creates corridors to link isolated pandas

(b) **Use your notes to write a summary of why the panda is an endangered species and what is being done to protect it, as described in the passage.**

Candidates have now fleshed out their notes into a piece of formal, continuous prose.

The mark for Style incorporates TWO categories of writing, namely OWN WORDS and USE OF ENGLISH. The table which follows on page 6 provides descriptors of the mark levels assigned to these TWO categories.

In assessing the overall mark for Style, first of all assign the script to a mark level under the category of OWN WORDS. Then arrive at the mark level for USE OF ENGLISH.

Under OWN WORDS, key pointers are: **sustained, noticeable, recognisable but limited**, **wholesale copying** and **complete transcript**. The difference between wholesale copying and complete transcript is that: in wholesale copying there is nothing / little that is original, but the copying has been selective and directed at the question; with a complete transcript the candidate has started copying and continued writing with little sense of a link to the question. Complete transcripts are rare.

Under USE OF ENGLISH, take into consideration the accuracy of the writing, and the ability to use original complex sentence structures.

Write marks for OWN WORDS and USE OF ENGLISH separately in comments box beneath the question. Access this comments box by clicking on the speech bubble on Scoris Task Bar. Add the marks for OWN WORDS and USE OF ENGLISH together and divide by two. Raise any half marks to the nearest whole number e.g. OW 3, UE 2, giving 3 to be entered in Scoris marks column.

HOW TO ANNOTATE Q1(b)

Use margin (either left or right) to indicate OWN WORDS assessment, and the body of the script to indicate USE OF ENGLISH assessment. Under OWN WORDS, use either T (text), O (own words), MR (manipulated or re-worked text) and / or IR (irrelevant).Where the candidate has more or less written a wholesale copy, but has substituted an odd word here and there (single word substitution) indicate these single words with O above them. Otherwise use the margin only for assessment of OW.

Under USE OF ENGLISH, use the body of the script for annotations. For accuracy assessment, use either cross or carat as appropriate for errors (over the errors). You may use carats for omission, but you are free to use crosses. Indicate only serious errors. If the same error is made more than once, e.g. omission of definite article, indicate it each time it is made. There follows a list of serious errors on page 5.

SERIOUS ERRORS

Wrong verb forms.
Serious tense errors.
Serious errors of sentence structure, especially in setting up subordination.
Omission or obvious misuse of prepositions.
Wholesale misunderstanding over the meanings of words used.
Serious errors of agreement.
Using a comma to replace the necessary full stop.
Mis-spellings of a simple, basic words, e.g. were/ where // to/ too/ their/ there.
Breakdown of sense.
Serious omissions, or serious intrusions e.g. of definite article. Ignore what are clearly slips.

For sentence structure merit use ticks where appropriate, in the body of the script. Tick only instances where the sentence structure is both complex and original i.e. belonging to the two top boxes in the Use of English column on the MS. Ticks, therefore, tend to be over relative pronouns, present particles and conjunctions. Do not tick vocabulary: this will be taken into consideration under assessment of OW.

Irrelevance: Put IR in the margin to indicate a stretch / section of irrelevance.
If script is entirely irrelevant, mark for style as normal (i.e. arrive at mark under OW and UE, then add together and halve) and give 2 max for style. Note that such scripts are extremely rare.

Wrong or invented material: Put a cross in the margin to indicate a stretch / section of wrong or invented material.

THE PRACTICE SCRIPTS WILL PROVIDE EXAMPLES OF HOW SCRIPTS SHOULD BE ANNOTATED.

Short answers

While examiners are not asked to count words, candidates have been asked to write 150 words. There is no penalty for long answers but, if a script is OBVIOUSLY short, please count the words, mark as normal (i.e. arrive at mark under OW and UE, then add together and halve) and award marks to the following maxima:
21–35 = 1 mark max for style
36–50 = 2 marks max for style
51–65 = 3 marks max for style
0–20 = 0 marks for style. No assessment of OW and UE is necessary.

Additional Objects: If there is an Additional Object on a script, indicate that you have seen it with a cross. Do not use ticks as sometimes these can be included in the scoris total at the top of the scripts and the wrong mark keyed in by the examiner.

	SUMMARY STYLE DESCRIPTORS		
Mark	**Own Words**	**Mark**	**Use of English**
5	• Candidates make a **sustained** attempt to re-phrase the text language. • Allow phrases from the text which are difficult to substitute.	**5**	• Apart from very occasional slips, the language is accurate. • Any occasional errors are either slips or minor errors. There is a **marked ability to use original complex syntax** outside text structures. • Punctuation is **accurate and helpful** to the reader.
4	• There is a **noticeable** attempt to re-phrase the text. • The summary is free from stretches of concentrated lifting.	**4**	• The language is **almost always accurate**. Serious errors will be isolated. • Sentences show some variation**, including original complex syntax**. • Punctuation is **accurate** and generally helpful.
3	• There are **recognisable but limited** attempts to re-phrase the text detail. Attempt may be limited by **irrelevance** or by **oblique or mangled relevance**. • Groups of text expression are interlaced with own words. • The expression may not always be secure, but the attempt to substitute the text will gain credit.	**3**	• The language is **largely accurate**. • Simple structures tend to dominate and **serious errors are not frequent,** although they are noticeable**.** • Where sentences show some variety and complexity, they will generally be lifted from the text. • Serious errors may occur when more sophisticated structures are attempted. • Punctuation is **generally accurate**.
2	• **Wholesale copying** of large areas of the text, but not a complete transcript, • Attempts to substitute own language will be limited to single word expression. • Irrelevant sections of the text will be more frequent at this level and below.	**2**	• Meaning is not in doubt but **serious errors are becoming more frequent.** [*8+ errors as a guide, but balance against sentence structure is also necessary*] • Some simple structures will be accurate, although this accuracy is not sustained for long. • Simple punctuation will usually be correct.
1	• Pretty well **a complete transcript** of the text expression. • There will also be random transcription of irrelevant sections of the text.	**1**	• **Heavy frequency of serious errors**, sometimes impeding reading. • Fractured syntax is much more pronounced at this level.
0	• **Complete transcript**	**0**	• **Heavy frequency of serious errors** throughout. • **Fractured syntax**

2 From paragraph 1, decide whether each of the following statements is True, False or Cannot Tell from the passage.

Mark	Expected Answer	Allow	Don't Allow
1 mark	Statement 1 is True	Any clear indication of choice even if it not a tick, e.g. cross, star, asterisk	*If more than one box indicated against any statement*
1 mark	Statement 2 is False		
1 mark	Statement 3 is Cannot Tell from passage		

Additional information
Tick correct answers. No need to cross incorrect answers, unless all are incorrect, in which case put a single cross in the bottom right hand corner of the answer.

3   From paragraph 1, which statement best describes what 'panda diplomacy' is? Tick the box you have chosen

Mark		Allow	Don't Allow
1 mark	The People's Republic of China lent pandas to the Japanese and Americans to establish good relations	Any clear indication of choice even if it not a tick, e.g. cross, star, asterisk	*If more than one box ticked*

4   From paragraph 5, select and write down one opinion.

Mark		Allow	Don't Allow
1 mark	pandas are universally loved OR pandas are adorable	Own words versions (this) universally loved animal / creature (these) adorable creatures / animals	*We might be encouraged … loved animal* *Territory which…adorable creatures*

5   (a) What did Miles warn Phelps about when he first went into the sea?

Mark	Expected Answer	Allow	Don't Allow
1 mark	the mud usually softened / got softer / got soft the further (out) you went (and you might sink in) / (he told him) not to go too far (out) because of the soft mud	Lift of lines 2-3 (the mud…you went) Excess denies There was soft mud ahead / in front of him quicksand	*There was soft mud* alone = 0 *Earth / soil / sand*

Additional information

Accept positive or comparative, and ignore tenses.

0 answers are 0(N). i.e. they do not negate an otherwise correct answer.

(b) Why do you think Phelps said, 'Thanks Dad' to Miles?

Mark	Expected Answer	Allow	Don't Allow
1 mark	Miles was speaking to him as if he were a child / baby /as a father would to a child / son / daughter (sic) // Miles was patronising him / talking down to him // he was being sarcastic / cheeky / mocking	Miles / He was worrying like a father Miles / He was behaving like a father Phelps / He didn't want to be treated like a child / baby Phelps / He didn't want a friend behaving like his father	*Any suggestion that Miles was Phelps's father = 0(W)* *He was being over protective / worrying (too much)* *He was warning / giving him advice* *He was rude / angry* *He was like a father*

Additional information

An 0(W) answer negates an otherwise correct answer.
Focus is 'dad' not 'thanks'. Award either the suggestion of a father / son relationship between the friends OR the tone of Phelps' response.

(c) Why do you think the narrator didn't say anything when Phelps went into the water above his knees?

Mark	Expected Answer	Allow	Don't Allow

1 mark	Phelps / he had ignored / mocked / been sarcastic about his (previous) advice
	
	// he'd found it useless to give Phelps / him advice
	
	// Miles / he knew he wouldn't listen
	
	// Miles / he didn't want to make him angry / nag him
		'Opinion' / 'comment' for 'advice'
		
		he'd been upset by Phelps's / his reaction to his (previous) advice
			He was wearing waders
			
			He had already warned him
			
			Phelps had already told him he was like his dad
			
			Phelps wasn't in danger at that time
			
			Phelps was getting angry
			
			He didn't want him to think he was worrying too much

Additional information
Accept past, future or conditional idea.

6   'It looked as if he'd skipped a step in a staircase'. What actually happened here?

Mark	Expected Answer	Allow	Don't Allow
1 mark	Phelps plunged // had a <u>sudden / accidental / unexpected</u> drop / fall / sinking / sucking down / descent / (into the mud)		*He had jumped / bounded / leapt /or any suggestion that his action was intentional = 0(W)* *The water suddenly got deeper = 0(W)* *Slipped / tripped = 0* (N)

Additional information

An 0(W) answer negates an otherwise correct answer.

7   (a)   **What effect does the writer create by saying that he felt the mud 'grab hold of his foot'?**

Mark	Expected Answer	Allow	Don't Allow
1 mark	That the mud is alive // a creature / person / monster	The mud is a hand The mud is malicious / out to get him	*dangerous* alone = 0 (N) *He is personifying the mud* alone = 0 (N) *It was as if the mud grabbed him* = 0 (N)

Additional information

All 0 answers are 0(N). i.e. they do not negate an otherwise correct answer.

(b) Explain in your own words the problem facing Miles.

Mark	Expected Answer	Allow	Don't Allow
1 mark	SHIFTED: (if he) moved / struggled / repositioned (himself / his foot) // rearranged / redistributed / transferred his foot/ weight EXTRICATE: (Tried / attempted) to get out / escape / recover / save himself / get his foot out	Award 1 mark MAX (i.e. one √) for synonyms of EITHER **shifted** OR **extricate**	*He would sink*
1 mark	NEVER BREATHE AGAIN: he would drown/ die / be killed / perish / expire	Colloquialisms e.g. he was done for	

Additional information

This is an OWN WORDS question. Key words are SHIFTED or EXTRICATE and NEVER BREATHE AGAIN.

Indicate use of key words by cross, or 'rep' for repetition, or highlight. Do not insist on correct grammatical form.

Mark what you see, i.e. ignore wrong answers unless it contradicts a correct one, e.g. 'moved and kept still' for 'shifted'.

Look for correct synonym. Any given context must be sensible for 2 marks e.g. 'if he escaped he would die' = 1 for 'never breathe again', but mark denied for 'extricate'.

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(c) What is the writer saying about Miles when he describes him as a 'kitten'?

Mark	Expected Answer	Allow	Don't Allow
1 mark	he is weak / helpless/ light / powerless // not strong / powerful // he is weaker etc than Phelps	He is as weak etc as a kitten. He is light in water.	*loveable / cute etc.* =0 *small / thin / weightless* *he is like a cat holding a kitten*

(d) How did Miles know the situation was 'worse'?

Mark	Expected Answer	Allow	Don't Allow
1 mark	<u>Phelps / his friend</u> had sunk deeper (into the water / mud) // the water was up to <u>Phelps's / his friend's</u> breastbone / chest // was near Phelps' / his friend's face // Phelps / his friend was <u>still</u> sinking	Lift of line 17 'The water was up to Phelps's breastbone' =1. Excess denies, including insertion of 'I was now free but……..' But change of pronoun = 1, i.e. He was now free but the water was up to Phelps's breastbone.	*'He' alone = 0.* *The mud was up to his breastbone = 0(W)*

Additional information

Insist on correct agent.

An 0(W) answer negates an otherwise correct answer.

8 (a) Pick out and write down the single word which tells us that 'other people had got stuck'.

Mark	Expected Answer	Allow	Don't Allow
1 mark	typical	The use of a correct word in a phrase or sentence provided that it is underlined or otherwise highlighted	*More than one word*

(b) From the information in the paragraph, why would Phelps' rescue be particularly difficult?

Mark	Expected Answer	Allow	Don't Allow
1 mark	rescue team / rescuers can't use planks to save him // he couldn't crawl (free / out)	The mud was not exposed / the mud was under water Lines 19-20 'A typical rescue…crawl free on' + but they couldn't do that	*Lift of lines 19 -20 (typical rescue…crawl free on) = 0. Answer must be distilled* *He was more than knee deep in mud alone = 0* *There were no wooden planks alone = 0*

9 What were the two ideas that Miles had to save his friend?

Mark	Expected Answer	Allow	Don't Allow
1 mark	(i) (to grab/ find /give him) a (piece of plastic) pipe / piping to <u>breathe through</u> / to use as a snorkel		*Pipe to breathe through easily = 0* *To give him a (piece of) pipe alone = 0*
1 mark	(ii) to find anyone / someone to help // to run / go for help		*Lift of lines 26-27 (I didn't really know…to help) = 0. Answer must be distilled.* *To call for help*

Additional information

Under both **(i)** and **(ii)** lifting will not work. Answer must be distilled.

If candidate gives two correct answers in one limb, award 1 mark max. **However**, if candidate has given two correct answers in one limb and has no response in the other limb, award 2 marks. Such answers will be rare.

10 (a) The writer says it was impossible to tell 'that anything horrific was happening'. Explain in your own words what made him feel this way.

Mark	Expected Answer	Allow	Don't Allow
1 mark	TRANQUIL: peaceful / calm / quiet /still / serene // not wild / turbulent		*silent*

1 mark	REASSURING DAYBREAK:
	
	(it was) hopeful / comforting /
	
	that the sun was rising / it was dawn / sunrise
	
	// daylight is not threatening
	
	// you can see more clearly in daylight
		soothing / promising / pacifying / encouraging / calming
		
		Award 1 mark MAX (i.e. one √) for synonyms of both
		
		reassuring
		
		AND **daybreak**	

Additional information

This is an OWN WORDS question. Key words are TRANQUIL and REASSURING DAYBREAK.

Do not insist on synonym for 'water' but context must be sensible.

Indicate use of key words by cross, or 'rep' for repetition, or highlight.

Do not insist on correct grammatical form.

Mark what you see i.e. ignore wrong answers unless they contradict a correct one e.g. 'peaceful and noisy' for 'tranquil'.

(b) Why did Miles panic when he reached the beach?

Mark	Expected Answer	Allow	Don't Allow
1 mark	He couldn't see / find (any signs of) Phelps // Phelps had disappeared // he thought Phelps had drowned	He could see no sign of Phelps	*Lift of lines 32-33 (I could see no sign of Phelps)* *Phelps had drowned =0(W)* *He feared the worst*

Additional information

An 0(W) answer negates an otherwise correct answer.

11 (a) What two things did Miles see just above the surface of the water?

Mark	Expected Answer	Allow	Don't Allow
1 mark	**(i)** (the narrow plastic) pipe	Lift of lines 35- 36 (the narrow plastic pipe … the shrinking shore) Excess denies.	
	(ii) (the top of) Phelps's head	Lift, in whole or in part of, lines 36–37(On a second … breaking the surface)	
	Both elements are needed for 1 mark.	Accept lift of lines 35–37 (the narrow plastic pipe … surface) = 1	

(b) Why do you think the writer describes the shore as 'shrinking'?

Mark	Expected Answer	Allow	Don't Allow
1 mark	the tide was coming in / had risen / was rising	It was covered / being covered with water The water level was rising / had risen The water / sea was / waves were coming in	*Mere definition of 'shrinking' =0, e.g. 'because you couldn't see as much of it'* *Tide alone = 0* *There was more water*

12 (i) What did Miles do to rescue Phelps?

Mark	Expected Answer	Allow	Don't Allow
1 mark	(Miles/ he) dropped (the loop of) the rope over / round him / Phelps / his shoulders / his chest		*He climbed on the old man's raft / he jumped into the water = 0(N)* *Threw / tied the rope = 0* *…rope <u>to / on</u> shoulders etc* *He pulled him out / he grabbed him = 0(W)*

Additional information

0(W) answers negate an otherwise correct answers. All other incorrect answers = 0(N).

(ii) What did the old man do to rescue Phelps?

Mark	Expected Answer	Allow	Don't Allow
1 mark	(the old man / he turned and) strode up the beach with the rope around his hips / pulled on the rope by walking / striding up the beach (with it)	Lift of line 43 (turned and strode…around his hips). Excess denies. 'Waist' for 'hips'	*Pulled Phelps out of the water* alone = 0 *He tied the rope round his hips* alone *He strode up the beach* alone *He supplied the raft* = 0 (N)

Additional information

Do not award a correct answer for either **(i)** or **(ii)** if it is accompanied by one of the actions of the wrong person, e.g. Miles tied the rope around his hips and threw the rope over Phelps = 0 in **(i)**.

13 **Choose five of the following words or phrases. For each of them give one word or short phrase (of not more than seven words) which has the same meaning that the word has in the passage.**

Mark	Words	Expected Answer	Don't Allow
1 mark For each correct meaning	1 temporarily (L13)	for a short time / briefly / momentarily / for a little while / for a short period / for a limited period	*Always / never / sometimes / occasionally / not permanently / partially / for the time being / for some time*
	2 fill him in (L29)	tell (him everything) / explain (details) / inform / give information / give details / brief / let him know	*communicate*
	3 inflated (L30)	blown up / filled with air / filled with gas / pumped up	*Big / expanded*
	4 burst(L30)	rushed / hurried / came <u>suddenly</u> / spurted / dashed / hurtled / flew / pelted / ran <u>quickly</u> / hurled <u>themselves</u> / threw <u>themselves</u>	*Exploded / reached / got to / arrived at / ran*
	5 sickening (L35)	horrifying / nauseating / horrendous / shocking / horrific / disturbing / horrid / horrible / ghastly / dreadful / awful / terrible / panicking / heart-stopping / stomach-churning	*Makes you vomit /ill/ /worrying / frightening / anxious /terrifying/painful / annoying*
	6 slightly (L40)	(a) little / (a) bit / (a) touch / just / barely / (a) tad / narrowly / (a) short distance / (a) fraction	*Partially / nearly / almost / somewhat/ somehow*
	7 clenched (L40)	fixed/ holding tightly/ closed tight(ly) / clutching / grasping / gripping / clasping / locked /squeezed / clinging / (holding) fast / firm / tightened / tight	*Pulling / wrapped / grabbed / hanging*
	8 insanely (L41)	madly / crazily / frantically / deranged / like a lunatic / maniacally / demented / frenzied / wildly	*foolishly / stupidly /abnormally / unnaturally / hysterically / unusually / intensely / mental / barmy / weirdly / desperately*

Additional information

Mark only the first FIVE words attempted.

For each word attempted, mark the first answer only when more than one answer is offered. A comma or the word 'or' indicates a second attempt.

For two answers joined by 'and', allow one correct answer if the other answer is not wholly wrong but neutral, e.g. 'clutching and pulling' for 'clenched'.

For a short phrase answer, mark the first <u>seven words</u> only (RUBRIC). *Credit a correct element within this limit.*

Ignore mis-spelling if the word is phonetically recognisable.

Ignore errors of tense and grammatical form *but only if the meaning is correct*.

If answers are numbered and the question-word has been given as well, credit a correct answer even if the numbering does not agree.

Tick only correct answers. There is no need to cross wrong answers but if all answers are incorrect put one cross only in the bottom corner.

Appendix

Pandas have always aroused interest and love. In ancient China, they were thought of as rare and noble creatures. The mother of one Chinese Emperor was buried with a panda skull in her tomb, and the grandson of another Emperor is rumoured to have given Japan two pandas as a token of goodwill. In the 1970s, loans of pandas to American and Japanese zoos marked the first signs of friendship between those countries and the People's Republic of China, giving rise to the term 'panda diplomacy'. However, nowadays the panda is also known to be an endangered species.

Pandas have been **the target of poachers** since ancient times for many reasons, including their warm fur. Sometimes their habitat is **destroyed by those who want to clear land for agriculture. This deforestation,** as it is called, is sometimes legal, sometimes not, but the effect is the same for the panda. A population explosion in China in the mid-twentieth century **increased the need for land, often panda habitat, for housing.** Around the same time, there was a **famine in China which led to increased hunting of wildlife, including pandas, for food.** When people are living under such conditions, it is hardly surprising that conservation issues are not high on their agenda. China's rapid economic expansion in relatively recent times means that some of the **panda's habitat has also been removed to make way for industrial development.** Even when their habitat is not completely destroyed, it is increasingly **fragmented by roads, railways and other infrastructure** that is part of this economic expansion.

Although pandas have been known to eat fish, bananas and eggs, their staple **diet is bamboo, around a kilo each day, and there are problems finding this large amount**. As their **habitat is encroached upon, pandas are forced to move higher and higher into the mountains, where there are fewer types of bamboo** available to them.

Pandas are further endangered by the fact that, when a cub is born in the wild, it lives with its mother for up to three years, and so each **female produces only a few cubs in her lifetime. Furthermore, they are not keen to breed in captivity**, despite many efforts by zoologists to encourage them to do so; for example, Bao Bao of Berlin Zoo has lived there for 25 years without reproducing. Although **nature reserves do exist to protect pandas, the staff are often inexperienced and lack knowledge** about how to manage such reserves. Conservation attempts are sometimes hindered by economics; **the cost of keeping a panda** is up to five times more than that of keeping the next most expensive endangered animal, the elephant.

Nevertheless, we might be encouraged by what is being done to protect this universally loved animal. **Conservation reserves have been opened** to prevent their numbers declining. Two decades ago there were **thirteen of these reserves, and by 2006 the number had risen to forty**. At the same time, **laws have been passed to limit ownership of guns to prevent poaching**, and to **remove people living on territory which has been reserved** for these adorable creatures.

Conservation organisations, for example the World Wildlife Fund, have worked tirelessly to protect the panda. The WWF has campaigned for an increase in the area of panda habitat under legal protection. Sometimes pandas become isolated by the encroachment of towns on their territory, and the **WWF has campaigned for the creation of green corridors to link isolated pandas.** In various parts of China, **patrols have been established against poaching and illegal deforestation,** manned by experienced and trained personnel.

Some **zoos borrow pandas to raise public awareness of the panda's plight** by educating visitors who flock to see them; an example of this is Edinburgh Zoo which, in January 2011, secured the loan of two pandas. Some of these **zoos insist they will pay the loan fee only if China spends at least half of it on panda conservation.** The WWF has used the **panda as its logo** since the organisation's foundation in 1961, thus further raising the profile ofthe panda and the need to conserve it.