

# The alpha wolf?

David Mech investigates

### ALSO:

Kodiak: a tribute Who's afraid of the Saxon wolf? Solved! The mystery of the black wolf

EVENTS MEDIA AND ARTS **NEWS REVIEWS** 

## Editor's Letter

t only seems like yesterday that I agreed to take over the reins of editing Wolf Print from Denise Taylor. We are already a year on and have four successful issues under our belts. Thank you all for your positive feedback; it's great when someone tells you they read the magazine from cover to cover. We hope over the year we have found our feet and catered to everyone's tastes.

This issue, I am proud to say, we have an article from the world's leading wolf expert, David Mech. Over the last year we have had the privilege of cultivating an excellent relationship with David, Nancy, Neil and the rest of the team at the International Wolf Centre. We would like to thank them for their advice and guidance in all things wolf. The eight UKWCT wolves have certainly benefited greatly from this liaison. You too can meet the IWC team on a once in a life time trip to the North West Territories of Canada - see details on page 7.

Ever wondered why we get black wolves? New research shows it relates to domestic dog genes; we investigate further with an incredibly interesting article by Stuart Wolpert.

For those of you who missed the seminar in May, Alistair Bath has written a very concise summary of his fascinating talk on human dimensions. He touches on his success in Croatia and the ongoing work he is involved with in Bulgaria and Armenia. His work is cutting edge in conservation and really is the way forward for wolf management plans in Europe and the world.

Amongst all the old favourites, such as our regular slot on the the UKWCT wolves, is a fitting tribute to Kodiak who sadly passed away in February.

Don't forget to check out the new and up coming events on the back page. It's going to be a busy summer so let's hope the weather gives us a pleasant surprise by staying warm and sunny, which I know the wolves will enjoy the most.

Enjoy!

Toni Shelbourne

Education Officer / Senior Wolf Handler / Wolf Print Editor

## Wolf Print



Editorial Team Angela Barrow. Angela Barrow, Sandra Benson, Vicky Hughes, Tsa Palmer, Denise Taylor

Butlers Farm, Beenham, Reading RG7 5NT Tel: 0118 974 0750 Fax: 0118 971 0522 Email: ukwct@ukwolf.org

Patrons David Clement Davies Erich Klinghammer Desmond Morris Michelle Paver Christoph Promberger

Charles Hicks Tsa Palmer

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#### Aims of the UK Wolf Conservation Trust

- To enhance the conservation, scientific knowledge and public awareness of the environment.
- To stimulate greater interest in wolves, their food, their habitat and their behaviour.

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#### © JimBrandenburg.com Wolf Pack Howling (Timber Wolves - Minnesota, USA)

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## 🐝 🏂 👀 Wolf NEWS

### Update on the Trust Wolves



Dakota

DAKOTA GAVE US CAUSE FOR CONCERN in March when a wart-type growth on her back right leg suddenly started to grow rapidly. The vet was called and he agreed that it looked suspicious and should be removed. While she was under the general anaesthetic we took the advantage of confirming her lymphatic cancer by doing a biopsy. She recovered well from the operation and although the wound took about five weeks to heal fully, she was back out in the enclosure with Duma within a week. She was a model patient and enjoyed the attention of all the nursing we gave her. After an agonizing wait the biopsy results showed that the lump was a harmless benign growth and that although she did have lymphatic cancer, this was low grade and under control with her existing treatment. She is still bright and happy in herself and continues to enjoy life to the full if a little slower these days. Winter was tough for her but when the weather was bad she just took herself off to a warm dry bed in her kennel until the sun came out again. Now it is summer she is much happier and although we have to periodically treat her skin for infections she looks well.

**DUMA** has adapted well to the loss of Kodiak. She is enjoying the extra attention as it is now safe for people to interact with her and Dakota in their enclosures again. She has resumed her role as teacher to newer handlers again and doesn't give them an easy ride if she feels they are not up to her high standards. Her ability to test them out and see who is really up to the job is quite outstanding. She only had a very short season this year which was probably due to losing Kodiak right at the beginning of the breeding season but her hormone levels made her feisty and she still dominated Dakota in the proper manner. She has added trouble on her hands now as the Mackenzie girls, Mai and Mosi, her arch enemies, have moved next door. She now spends half the day making sure they haven't invaded her territory. Any chance for an early morning fence run is taken up with much enthusiasm.

THE EUROPEAN WOLVES have been very playful of late. Perhaps especially charming is to see ALBA cavorting with his sisters like a young pup. A favourite game for him is when they are all mock-pouncing each other, then twisting away so that they don't get 'caught'. Alba is good at this but maybe his GPS needs updating because he will spin around at speed and ends up facing in the opposite direction. While Lunca and Latea are metaphorically sniggering behind their paws, Alba gazes into a distance that is suddenly and inexplicably completely devoid of sisters. At other times Alba has a mind of his own and does not like to be disturbed when busy - for instance when having a private dip in the water trough. He loves to paw up the water vigorously and bite

and snort at it. A fascinated handler laughed at these antics, whereupon Alba stopped, turned slowly and gave his audience a very old fashioned look. The suitably chastened handler walked away and Alba continued his ablutions. As spring turned to summer his summer allergy returned and he began to itch. This year we have been trying him on a new drug called Atopica. Although it is really expensive and costs the Trust about £160 per month it is safe to use with his painkillers.

Time will tell if it works or if we have to put him back on steroids which don't mix well with the painkillers.

The decision to neuter all three European wolves last autumn proved to be the right one, as LATEA's behaviour towards LUNCA this breeding season was improved by about 90%. Although she still dominated her in the normal fashion which is typical of female wolves, the aggression was much reduced and they all came through the season relatively calmly. She did have a couple of bullying sessions whilst out on walks with the handlers but Alba also proved that being neutered has not taken away his ability to play his role in

policing Latea and keeping peace amongst the girls. Latea has remained playful and calm and as their food requirements have reduced since the neutering, her playful side has been causing the feeders some problems. Often as the wolves have been let in through the traps to get their food, Latea, if in a playful mood, has been known to drag the other two back out again to finish her game. She even uses them as a jump and often soars effortlessly over their backs.

The only downside to neutering the Europeans has been the reduction of their food requirements by about half and often they aren't hungry at all. This has meant it has been very challenging to maintain Lunca's diet. An elaborate plan of restricting her diet while maintaining the pack competition feeding was hatched which seems to be working and she has possibly lost a few pounds we hope. She is the trickiest of all the European wolves when it comes to working out what we are doing, and will always outsmart the handlers if we change her routine or do something different. For example, we wanted to introduce a new feeder on the rota but had to be really careful who we asked as the Euros and Torak can be very suspicious of change. Luckily, Pat Melton knows the wolves really well and they have all adapted beautifully to him feeding them.



Alba, Lunca and Latea

We were initially concerned about the Euros' reduced food intake, but having consulted our vet and experts from the International Wolf Centre, Nancy Gibson and David Mech, everyone concluded that as long as they maintain their weight then it's not a problem.

The first true breeding season for the **MACKENZIE PACK** happened this spring and they are now fully mature adults. Much flirting was seen by Mai towards Torak who wasn't always keen on the added attention and not quite sure how to proceed. On one occasion Torak was seen mounting Mosi and in her scramble to get out of his and ▶

#### **FROM THE DIRECTORS**

By the time you read this, the Wolf Centre will be in full swing for the summer season. Not only people, but wolves too, welcome the change of warmer weather. Though they relish the cold and they look at their most magnificent, winter time is an isolated time for all beings. The wolves enjoy seeing people as human visitors are a form of social enrichment. When we approach their enclosures the wings of their nostrils twitch and flare as they gather information about us... what scent we carry... what food we recently ate... etc.

This summer we plan six open days between 25th May and 7th November. These will enable people to visit the centre informally, photograph the wolves and observe them in their enclosures for as long as they like. Volunteers will be on hand throughout the day to talk about the wolves and answer questions. You will learn about their medications and see them being given. There will be refreshments available and supervised children's activities so something for all the family.

On Sunday October 4th we are holding our second World Animal Day Celebrations here at the Trust. This year the theme will be North American Wolves. The Trust has predominantly North American wolves and

▲ Mai's way, all three toppled down the side of the mound and into the pond. We didn't see Torak mating with either of the girls, in captivity and a small pack with only one male; it is likely he would try to mate with both girls, but who knows what went on under cover of darkness!

Like the Euros Torak has adapted well to Pat Melton joining the feeding team. Pat and Torak have a good relationship, that and our no-nonsense approach when getting him in has helped improve his track record. He can be as tricky as Lunca with change and can also change his mind at the last minute and decide not to go in for his meal. It's a game of nerve and wills with the feeders to make sure all the wolves get the right amount of food, too much and nobody wants to come in for their breakfast the next day.

Mai continues to be extremely friendly with people and a joy to interact with. Why waste money on an expensive hair-do when you can get that fashionable tousled look from her? The smell of conditioner, shampoo and everything else will prompt Mai to rub her face and neck in your newly coiffured hair until it is standing up on end. Being clean and to tie in with the recent wonderful documentaries on the wolves of Yellowstone we thought it would be appropriate and interesting.

US wolves were hunted to near extinction in the "lower" 48 states by the 1930s and



the reintroduction of wolves has been a huge success. We plan to have talks on the wolves in Yellowstone and the wolf as a symbol in folklore, as well as pastel workshops and art displays during the day as we did last year.

New will be "dancing with wolves". There will be several displays by an American Indian dance and history company during the day outside their tepees. They perform in original outfits up to 100 years old to live music including drum and Native American flute. The Native American connection to the wolf is legendry and they have great respect and understanding that wolves were an important part of the ecosystem. The American West Company demonstrates and recreates the music, dance, history crafts and customs of their people.

newly washed is not the first concern of a wolf handler as you never stay that way for long. She has proved this spring she is the right wolf for the dominant female role as she managed Mosi well throughout the breeding season. Mosi on the other hand probably didn't think so and was a bit bruised and battered for a few weeks. A course of arnica and some TLC while out on walks sorted her out though and made up for her sister's exuberant suppression.

Both Mosi and Mai went to college in March to help teach animal care students about all things wolf (see page 6). Both girls performed like professionals and really are taking over the role of chief ambassadors from Duma and Dakota.

Mosi is more like Dakota every day in her attitude and manner. Being the lower-ranking wolf in the group is always testing for any wolf that has a natural ambition to rise up the social ladder. Not to worry as she has new handlers to practice on and some older ones too. Unluckily for her, we have seen it all before and she, we suspect, mumbles about the injustice of it all as she walks off having got nowhere. One trick one of our senior handlers World Animal Day 2008

We shall also have British wildlife on site and many will be hands-on exhibits. There will be birds of prey, Secret World wildlife rescue, and nature-based activities for children including supervised art and craft competitions and an official howling competition to bring out the wolf in all of us! Also, Martin Adams, 2007 World Darts Champion will be attending.

Watch out for further information on the website and in the next issue of Wolf Print.

We look forward to seeing you here in the summer.

Tsa Palmer DIRECTOR

has is to laugh at her and kiss her nose as Mosi talks away to herself. Mosi is partly dismayed by this action but usually calms down very quickly as she loves the attention and will settle down for a fuss.

Now coming into the height of the British summer all the wolves are looking forward to some well earned sunbathing, their favourite pastime of all.

Torak - Claire Ash





### Mai and Mosi go to college

**SPARSHOLT COLLEGE** near Winchester has been visited by UKWCT wolves for the past two years, but this was a first for Mai and Mosi, two of our Mackenzie Pack, who went to campus in March.

Sparsholt College is one of the leading specialist land-based colleges in the UK and offers a multitude of courses from Animal Management to Horticulture and holds no less than three individual awards for Centre of Vocational Excellence from the Learning and Skills Council.

On this visit, first year National Diploma students in Animal Care

were given a PowerPoint presentation by Toni Shelbourne, the UKWCT's Education Officer, and then came outside in five groups of around 20 students each to see Mai and Mosi.

There is nothing like a real, live wolf to fix information in the brain and the students were given a short talk on a wolf's extraordinary senses - hearing, sight and, of course, their amazing sense of smell.

Mai and Mosi were impeccably behaved as their various points were shown, Mai even allowing her mouth to be gently opened to display her canine teeth!



Mosi at Sparsholt College

At the end of the visit, Bjorn Holm, the course tutor, was kind enough to show some of the handlers around the college.

Angela Barrow

### Student helps out at the Balkani Large Carnivore Project in Bulgaria

THE UKWCT ASSISTED PROJECT in Bulgaria got a much needed boost of labour in April when the Trust sent out the fifth student on its exchange programme. Tom Smith will stay for six weeks to help out with tracking wolves, locating den sites and helping out around the centre which includes looking after the two resident socialised wolves and Medo the bear. While Tom is there he will also be gathering data for his MSc in Ecology and Environment. This student exchange programme has only been possible due to a large donation from Bacardi. Another student will be helping out in September for three months.



Balkani Large Carnivore Project, Bulgaria© Denise Taylor



#### **Kodiak's Ashes and Plaque**

Kodiak's ashes have been scattered in the same place as Kenai his sister. Volunteers wanted to mark the passing of the last founder wolf by donating money for a plaque to commemorate his life. The plaque will be placed on a stand by their new commemorative Rowan tree outside the bottom enclosure. From the donation there was enough money left over to also redo Mika's marker which was damaged recently when the grounds were being maintained. Mosi and Mai's sister's plaque will also be sited by her memorial tree. This, the volunteers thought, was a fitting tribute to wolves that have done so much to help their wild cousins; when wolves

depart they leave a big hole in the lives of the volunteers and staff who worked so closely with them. A full tribute to Kodiak is on page 11.

#### DVD Camcorder Appeal

TONI SHELBOURNE, the Trust's education officer, is looking for a camcorder. Can you help? It will be used in the education programme for work experience students and catching wolf behaviour on film to include in presentations. Toni savs Wolves display behaviours so quickly that if you blink you can miss it or they will be doing several things at once. It's really hard to point out everything that is going on so being able to play it back or slow it down would be amazing for the students'.

If you have a DVD camcorder kicking around at home that you don't want, or feel like donating some money towards one, please contact Toni by emailing education@ukwolf.org or phone the office on 0118 971 3330. The camcorder must be able to have clips transferred to a computer so we can use the footage in our PowerPoint presentations.

Thank you.

## members' page

## competition

#### What Wolfy Events Would You Like to See at the UKWCT?

At the moment we have :

- howl nights
- open days
- seminars
- members' walks, etc.

If you have any ideas or suggestions for talks or different types of events, send us a title and brief description. The best idea gets a £20 voucher to put towards any of our future special events.

Deadline 1st August 2009

Email education@ukwolf.org



What do you think?

The new style Wolf Print is a year old this issue. Tell us how you think its going by emailing your comments to education@ukwolf.org

We are really enjoying reading your poems and stories and printing your photos, so don't forget to send them in... this is your page.

### FOR THE ADVENTUROUS! A UNIQUE TRAVEL OPPORTUNITY Do something wild

## this summer!

Join the International Wolf Center on the trip of a lifetime and explore Aylmer Lake, Northwest Territories, Canada, with the world's foremost wolf biologist, L. David Mech and Canadian biologist Dean Cluff.





Spend the days discovering the magic of this untamed wilderness with its abundant wildlife. Search for wolves, caribou and musk oxen, and learn about their dynamic relationships.

The Cost is US\$3550 plus round-trip air fare to Yellowknife, NWT. Space is limited to just 11 travellers! Late bookings are being accepted. For more information, go to http://tinyurl.com/d97nvg or http://www.wolf.org/wolves/experience/programs/programs.asp?program\_id=88

Contact the trip coordinator Neil Hutt at ghshades@aol.com to book.

## Human Dimensions Working with people toward effective conservation

Alistair J. Bath Ph.D Human Dimensions in Wildlife Management St John's NL Canada hile there are people in the world who are interested in the environment, in finding sustainable lifestyles, and who are willing to conserve wildlife whether



Dr Alistair Bath is a world leading expert in human dimensions in the field of wildlife management.

He kindly agreed to speak at our recent seminar on the subject and has also contributed to an exciting new series of books called 'A New Era for Wolves and People; Wolf Recovery, Human Attitudes, and Policy' which will be available at the UKWCT World Animal Day on 4th October 2009.

wolves, brown hears elephants or rare lichens, these people, for the most part, remain in the minority in a global society that remains focused on sustaining growth. At a time when economics is dominating the world scene, it would seem particularly important and an incredible opportunity for the global society to recognise the connection between the environment and the economy, and no longer consider the two as separate identities. How can the human species expect to continue to grow, measure success in continued increases in gross domestic product, and not expect to lose habitat that is essential for other species? The reality is conservation of species and habitat occurs only when people choose to

actively do it. Hence, no matter the plethora of funded biophysically based research that can be done to understand the species, the home ranges, diet or habitat requirements, a species survives when, and only when, humans decide to value it, have positive attitudes toward it, and actively engage in doing something to conserve it. Therefore, the research priorities today and for the future for effective conservation must be in understanding people, or the human dimension component of conservation. Without public tolerance, acceptance and even better support, we will never succeed in the conservation challenges that lie ahead.

Individuals supportive of wolf conservation, like members of the UK Wolf Conservation

Trust and members of other similar organisations worldwide, have already placed a value on wolves, wildlife habitat, on minimizing conflict between wolves and people, and hopefully work towards building better coexistence between the predator of our childhood nightmares (e.g. wolves dressing in disguises as grandmothers, chasing pigs, and attempting to break and enter by coming down chimneys) and people. Traditionally, these latter efforts have focused on the easy interest group of children in the hopes and assumption that their young minds can be moulded, and that these future generations will be supportive of the "new conservation". Unfortunately though, we continue to lose species today, (perhaps not as many wolves as in the past), because we fail to effectively engage those currently responsible for successful or unsuccessful conservation efforts. Adults who are hunters, foresters, environmentalists, shepherds, rural and urban general public residents are the key interest groups that require our focus today to ensure successful conservation. They are more challenging to work with than children, but these adults have the power in the household to make environmental differences and set examples today for their children to follow.

Studying and understanding people who strongly support or strongly oppose wolves is in many ways more complex than studying the biophysical characteristics of wolves. Conducting research to understand and eventually influence these public attitudes and subsequent behaviour is more challenging but possible. And similar to how there are many biophysical studies that can be done on wolves, studying people can provoke many research questions and applied conservation projects. While we would want some more details if a scientist said they were going to do some "biology", when we hear the word "human dimension" we should begin to think the same. There is much work to be done within this relatively new field of human dimensions in natural resource management.

#### The wildlife management - human dimension relationship

Wildlife management has been defined:

"as the science and art of changing the characteristics and interactions of habitat, wild animal populations, and people in order to achieve specific human goals by means of managing wildlife resources. In one form or another, everything done in wildlife management is done for the people" (Anderson et al. 1987). Biophysical scientists have focused upon understanding the species and considerable discussion has often occurred about endangered species. Emphasis in wildlife management then shifted away from studies of the species to the need to understand the spaces where these species survived. Biophysical scientists began discussing endangered spaces (Hummel 1989). Biophysical scientists have not, however, adequately addressed the people component of the equation and with some species, particularly large carnivores, this human dimension is probably more important than the biophysical component. Social scientists (e.g., human geographers and rural sociologists) began to apply techniques to understand the people part of the wildlife management equation. This application of studying people and their interactions with wildlife was later termed human dimensions in wildlife management. Today, successful wildlife management involves not only an understanding of the biology of the species and its habitat, but also an understanding of public attitudes toward and knowledge about the species and attitudes toward possible management approaches to the species. The human dimension of wildlife resource management is particularly important to understand when designing and implementing management plans for large carnivores, which often arouse conflicting emotions among the general public. Indeed, large carnivore management is often more a socio-political issue than a biological one (Bath 1998). Wolf populations and their conservation in France for example appear to be highly dependent upon human factors more than biological factors. Bear conservation in Spain may depend more on changing people's behaviour of setting snares for wild boar (which leads to bears being caught and killed) than to understanding biology of the bears themselves (Bath 2000). These human aspects of the wildlife resource management equation need to be understood through a scientific and objective process for successful large carnivore conservation to occur in Europe.

While wildlife management by definition has for many years realised that there is indeed a dimension human to successfully implementing species action and management plans, integrating human dimensions into daily decision-making remains a challenge for many wildlife agencies. In North America, Aldo Leopold, considered the founder of wildlife management in North America, stated in 1943

in understanding the amount of support that existed for wolf restoration, and the reasons why people were in favour or against wolf restoration (Bath 1991, Bath 1989, Bath and Buchanan 1989). This latter data were useful in designing effective educational efforts and working toward conflict resolution. Wolves were eventually restored to Yellowstone National Park in 1995 with many interest groups supporting the restoration effort; only sixty years earlier poison campaigns occurred within the same national park. Human dimension results allowed managers to successfully address the issues and concerns of many of these groups, and by working with groups, rather than against them, wolf conservation occurred.

Involving the public in the early development of a management plan was also the key to a successful wolf management plan for the Yukon, Canada. Various interest groups were given the authority by the Department of Renewable Resources to design a wolf management plan; the plan included measures for wolf control and wolf protection, and although controversial, the plan was accepted. In this case a public involvement approach that allowed interest groups to effectively make decisions and place values on scientific data provided by the government, did work in the design and implementation of a wolf management plan. In contrast, wolf management plans including wolf control and wolf protection areas in northern British Columbia and Alaska were not successfully implemented; the basic reason being that the various publics were not meaningfully involved in the resource



that deer management was more about managing the people than managing the deer. Since those early statements, the human dimension in wildlife management has become increasingly integrated into wildlife management planning and decision-making in North America and with some very positive results. Wolf restoration efforts in Yellowstone National Park included a human dimensions component, which was important understand each other's core values and concerns. Groups reached an acceptable compromise and produced management plans that all groups could support because each plan addressed the fundamental concerns of each group. Such "win-win" scenarios are only possible with an implementation of a human dimensions research and applied approach. Past human dimensions research has determined that the following beliefs seem to be the most important in affecting attitudes toward wolves:

- Beliefs about the population numbers (how many wolves actually exist?)
  - Those individuals who believe there are fewer numbers tend to hold more positive attitudes toward the species.
- Beliefs about the population status (are the numbers increasing, decreasing, or remaining stable)
  - Those individuals who believe the population is decreasing tend to hold stronger positive attitudes toward wolves than those who believe the population is increasing or stable.
- Beliefs about the number of attacks by wolves on people
  - Those individuals who believe there have been attacks and high numbers of attacks hold more negative attitudes.
- Beliefs about the number of human deaths caused by wolves
  - Those individuals who believe wolves have killed people tend to hold strong negative attitudes toward the animal.

Understanding belief systems and the relationship between beliefs, attitudes and behaviour can be one of the most important uses of human dimension conservation projects. In France, a beliefs and attitudes human dimensions study was used to provide the terms of reference for a communication officer (Bath 2000). In addition to an understanding of key beliefs affecting attitudes, the human dimension conservation project in France identified which value persuasive messages (e.g. wolves for future generations) were important in affecting overall attitudes toward wolf management options. And while some is known of public beliefs about wolves (Kellert 1985, Tucker and Pletscher 1989, Bath 1989, Bath 1991), much less is known of public beliefs about other large carnivores (Jope and Shelby 1984, Braithwaite and McCool 1989). In those cases where attitudes are directly being affected by beliefs, targeting such beliefs can be effective; however, attitudes toward the issue could be influenced by other factors. Therefore, we need an understanding of the nature of conflict.

Unfortunately, few organisations understand the key beliefs affecting attitudes before designing educational efforts (e.g., posters, brochures, videos, etc.); consequently the effectiveness of such efforts is unknown. More recently human dimensions studies have been implemented in many parts of Europe that now help guide the development of new material in those cases where beliefs

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#### HUMAN DIMENSIONS

underlie the expressed attitudes. In many cases knowledge of the underlying factors affecting attitudes has yet to be done. An assessment of large carnivore educational materials (Bath and Tavares 2000) found that available material varies considerably across species and across countries in terms of quality and quantity. Without knowing what information currently exists within the various publics, what beliefs are most directly linked to attitude, the nature of the conflict, and how different beliefs affect different target audiences, such educational materials may not be effectively working. A stronger statement may be to say that such efforts are similar to "shooting in the dark".

## Understanding the nature of conflict

Human dimension conservation projects can work towards achieving public acceptance of large carnivores by providing a better understanding of the nature of conflict between all interest groups. Identifying where conflict exists is the first step towards conflict resolution.

There are basically four types of conflict:

- Cognitive
  - Cognitive conflict results when there is a difference in beliefs between various interest groups. These beliefs may or may not be true.
- Value
  - A value conflict occurs when there is a difference in the importance of an issue between various groups. This could result because of a hierarchy of values within a value system.
- Costs/Benefits
  - A costs/benefits conflict occurs when there is a difference perceived between groups of who bears the costs of implementing an issue versus who reaps the benefits of such an issue. A group may feel unfairly that it must suffer all the costs while another group gets the benefits.
- Behavioural
  - A behavioural conflict can be a personal conflict between individuals of different agencies over issues not directly related to the issue at hand. A behavioural conflict could also exist due to a mistrust of a particular agency by another interest group based upon past history with the agency or organisation.

The most common conflict in natural resource management issues is in fact behavioural conflicts, and yet traditionally we treat most conflicts as cognitive issues and design expensive educational efforts only later wondering why they may not have been In addition, wildlife resource effective. management issues would be relatively simple if in each conflict there were only one of these types of conflict happening at one time. The reality many times is that several types of conflict could be happening at once. Human dimensions research can help identify the nature of the conflict and begin "peeling back the layers of the conflict", thus enabling a better understanding of the people component and the necessary direction toward a possible solution. It is important to recognise that traditionally we have assumed that all conflicts can be solved through more public awareness and educational materials. Depending upon the nature of the conflict, educational materials could be absolutely useless; in fact unless a cognitive conflict exists, educational materials is not the way to resolve the conflict. To resolve most of the conflicts requires listening more than talking. We are born with two ears and one mouth and perhaps we should be listening at least twice as much as talking when engaging various interest groups. In addition, the first contact with groups should be a listening exercise of key issues and concerns, not a presentation of what "you" believe so to educate the others. The second session should be a presentation of what "you" heard, and perhaps a beginning of connecting the interest group or community issues with those of "your" own. Only through communicating with interest groups (listening and then talking) can trust be built between groups and effective conservation occur. Human dimensions research can be used to build that trust and to understand and to address the nature of the conflict between all groups.

In the form of a summary, human dimensions research:

"focuses on the public's knowledge levels, expectations, attitudes and activities concerning fish and wildlife resources and associated habitats. There is a close tie between human dimensions and conservation education research" (Adams 1988).

Human dimensions research can address various objectives:

- Baseline assessment to begin attitudinal and belief monitoring - has an educational effort, management policy, made a difference?
- Educational role targeting specific weaknesses in knowledge to affect attitudes. Working toward designing more effective educational materials.
- Building partnerships bringing groups together around a common data set.

Working toward understanding the issues of a variety of interest groups, building trust, and initiating the first steps toward working together.

- Identification of areas of support and disagreement over management options, thus assessing the feasibility of approaches being successfully implemented.
- Identification of types of conflict (cognitive, values, costs/benefits, and behavioural conflicts) - the first step toward conflict resolution.

Human dimensions research can address many questions and can provide managers with useful information for decision-making. It is important for managers to clearly define how they wish to utilise the results; this will affect all aspects of the study, from the formulation of the problem, design and collection of the data, analysis and presentation. Similar to how one biophysical study can't answer all the biophysical questions surrounding an issue, one human dimension study can't address all the social science questions that pertain to the issue. We must all, though, realise that the core to successful conservation lies with working with different interest groups who have different values, different interests and different economic implications of conserving wolves and other species, rather than working against these key interest groups. As individuals interested in wolf conservation, I encourage you to continue to be willing to listen to diverse opinions and work toward solutions.

Alistair J. Bath Ph.D





White the death of Kodiak in February the last remaining founder wolf of the UKWCT has gone. Kodiak was a magnificent specimen of a North American wolf, one of our most popular and second to none in his majestic appearance. In character, he was one of the most dominant I have ever known in nearly forty years of keeping wolves.

Kodiak originally came with his sister Kenai from Woburn Safari Park in April 1994, at eight days old. Like the many wolves Roger and I hand reared before, in their first few weeks they lived in the darkened airing cupboard in the house, in a cardboard box on a towel over a hot water bottle. They both weighed less than 1lb but Kodiak was much larger than Kenai as he was to be in later life. They were then fed four hourly on whelpi, a canine milk substitute, going onto Weetabix and then meat.

Kodiak, Kenai and Denali, the three founding wolves of the UKWCT were named after places in Alaska that Roger and I had visited in 1985. This was a wonderful trip; we went to Denali National Park, Kenai, Katmai (the name of another wolf) and lastly Kodiak Island, which is in the Bering Straits between Alaska and Russia. The grizzly bears there were truly enormous standing about 12 foot on their hind legs, so it was appropriate that Kodiak had this name.

As Kodiak grew it was obvious he was going to be a special wolf, he was happy to be walked and meet people until he was about two and a half years old, i.e. until reaching maturity. At this stage he started to test people he met and growl at them so he was retired from public life as his behaviour became more difficult. In August 1996 Roger was diagnosed with a brain tumour

### 1994-2009 - the end of an era

and, after a successful operation to remove the tumour, there followed a period of some four months of radiotherapy and convalescence. In December, when Roger had returned to work, he went in the enclosure to see Kodiak; sensing Roger's weakness he became very dominant and went as if to attack him; Roger never again interacted with him.

The only person who had a relationship with Kodiak, and whom he respected, was Colin Thorne. Colin had been involved with the trust since 1994, he knew Kodiak before his maturity and had formed a lifelong bond. It was Colin alone for the last years of Kodiak's life that could handle and walk him. Seeing Colin and Kodiak was an amazing experience; when Colin handled Kodiak, he growled most of the time and held his tail erect as if

challenging him. Colin spoke to Kodiak quietly and firmly, they respected each other and it was remarkable to watch them

interact together.

Kodiak was a character and when Dakota,

Duma and Kodiak were moved into the

enclosure with the new pond last summer it

was Kodiak that first tried it out, rather by

default I think as he investigated the

water's edge and then fell in. Last October

he was still living life to the full, joining in

the pumpkin enrichment fun at the Halloween events at the Trust. But most often he would be lying in his favourite place in the enclosure sleeping in the sun. When Duma and Dakota were taken out to do events I don't think he even noticed they were gone.

Kodiak was generally a healthy wolf all his life, but for the last four years he suffered from sebaceous cysts which used to burst on his back. In the summer this was a concern as he was prone to fly strike. Due to very conscientious checking, treating and grooming by Clive Reading, our wolf keeper and the volunteers, we were able to keep on top of this problem. He was also on medication for arthritis for several years. Finally last December, after noticing that he was urinating blood, he was diagnosed with a bladder tumour. Although responding for a while to treatment sadly in February Kodiak suddenly went off his food and went down hill rapidly over just a few days. He was put to sleep on the 11th February out in his favourite part of the enclosure. When you take into account that wolves in the wild are lucky to see half of Kodiak's 15 years, he hadn't done badly. Duma and



Dakota were given the opportunity to say their goodbyes.

Duma and Dakota - who shared the same parents Monty and Epsom as Kodiak and Kenai - although obviously missing him, have adapted well to life without him. In a sense it has opened up more contact with handlers and volunteers in their enclosure as it is easier to interact with the girls without Kodiak's presence. He is sorely missed by all volunteers, staff and members.

Tsa Palmer

Pictures from top: Colin and Kodiak, Anne Carter Kodiak with Halloween treat, Pat Melton

#### Duma and Dakota parents Monty and

## Life and behaviour of wolves Whatever happened to the term Alpha Wolf?

#### L. David Mech

The word alpha applied to wolves has had a long history. For many years books and articles about wolves have mentioned the alpha male and alpha female or the alpha pair. In much popular writing the term is still in use today. However, keen observers may have noticed that during the past few years the trend has begun to wane. For example, 19 prominent wolf biologists from both Europe and North America never mentioned the term alpha in a long article on breeding pairs of wolves. The article, titled "The Effects of Breeder Loss on Wolves," was published in a 2008 issue of the Journal of Wildlife Management. In the 448-page, 2003 book Wolves: Behaviour, Ecology, and Conservation, edited by Luigi Boitani and myself and written by 23 authors, alpha is mentioned in only six places and then only to explain why the term is outdated. What gives?

#### THIS CHANGE IN TERMINOLOGY REFLECTS

an important shift in our thinking about wolf social behaviour. Rather than viewing a wolf pack as a group of animals organised with a "top dog" that fought its way to the top, or a male-female pair of such aggressive wolves, science has come to understand that most wolf packs are merely family groups formed exactly the same way as human families are formed. That is, maturing male and female wolves from different packs disperse; travel around until they find each other and an area vacant of other wolves but with adequate prey, court, mate, and produce their own litter of pups.

Sometimes this process involves merely a maturing male courting a maturing female in a neighbouring pack and then the pair settling down in a territory next to one of the original packs. In more saturated

populations, this may mean wolves moving many miles to the very edge of wolf range and finding mates there

that have similarly dispersed. This is the process that helps a growing wolf population expand its range. A good example is the ever-increasing wolf population in Wisconsin. There, not only is the main population in the northern part of the state continuing to fill the north with more and more pack territories, but wolves have managed to form a separate population in the central part of the state through this dispersal and proliferation of packs; currently about 18 packs live in central Wisconsin.

But now back to the family. As the original, new pairing wolves raise their pups, they feed and care for them just like

any other animals care for their young. As the pups grow and develop, their parents naturally guide their activities and the pups naturally follow. During fall when the pups begin to accompany their parents away from the den or rendezvous site and circulate nomadically around the territory, the pups follow the adults and learn their way around. The parents then automatically fall into the leadership role in the pack as they guide the pups throughout their territory. This leadership role, however, does not involve anyone fighting to the top of the group, because just like in a human family, the youngsters naturally follow their parents' lead.

Certainly as the pups further develop, they begin to gain some independence, and individuals might temporarily stray



dominate the new pups just as older brothers and sisters in a human family might guide the younger siblings, but still there is no general battle to try to gain pack leadership; that just naturally stays with the original parents. Some of the older siblings will disperse between the ages of one and two in some populations, and in others they may remain with the pack through about three years of age. However, eventually almost all of them will disperse, try to find mates, and start their own packs.

Given this natural history of wolf packs, there is no more reason to refer to the parent wolves as alphas than there would be to refer to the parents of a human family as the "alpha" pair. Thus we now refer to these animals as the male breeder and female breeder and as the breeding pair or simply the parents.

## So how did science get so far off track for so long and refer to the parent wolves as alphas?

from the group, exploring this and that along the pack's travels. However, the parents continue to guide the group as they hunt prey, scent-mark the territory, fend off scavengers from their kills, or protect the group from neighbouring wolf packs that they might encounter.

As the pups continue to develop and reach one year of age, their parents produce a second litter of pups, which become the younger siblings of the first litter. Again the parents continue to guide and lead the new litter along with the older litter and remain the pack's leaders. The yearlings naturally So how did science get so far off track for so long and refer to the parent wolves as

alphas? The answer is an interesting story that nicely illustrates how science progresses. Several decades ago, before there were many studies of wolves under natural conditions, scientists interested in animal social behaviour thought the wolf pack was a random assemblage of wolves that came together as winter approached in order to better hunt their large prey. Thus to study wolves in the only way they knew how, these folks gathered individual wolves from various zoos and placed them together in their own captive colony.

When one puts a random group of any species together artificially, these animals will naturally compete with each other

and eventually form a type of dominance hierarchy. This is like the classical pecking order originally described in chickens. In such cases, it is appropriate to refer to the top-ranking individuals as alphas, implying that they competed and fought to gain their position and so too it was with wolves when placed together artificially. Thus, the main behaviourist who studied wolves in captivity, Rudolph Schenkel, published a famous monograph describing how wolves interact with each other in such a group, asserting then that there is a top-ranking male and a topranking female in packs and referring to them as the alphas. This classical monograph was the main piece of literature on wolf social behaviour available when I crafted my book The Wolf: Ecology and Behaviour of an Endangered Species in the late 1960s.

This book was a synthesis of available wolf information at the time, so I included much reference to Schenkel's study. The book was timely because no wolf pack without mentioning the alphas. Many people would ask me what made an alpha wolf an alpha and what kind of fighting and competition did it take to the public spend much time observing wolves right along with wolf biologists and naturalists. Because the Yellowstone wolf population was newly restored and

## The issue is not merely one of semantics or political correctness. It is one of biological correctness

gain that position. Thus, in 1999 I published the article "Alpha Status, dominance, and Division of Labour in Wolf Packs" in the Canadian Journal of Zoology formally correcting the misinformation in the scientific literature. I followed that up in 2000 with the article "Leadership in Wolf, Canis lupus, Packs" in the Canadian Field Naturalist, further elaborating on the role of the parent wolves in the pack's social order.

However, it has been said that it generally takes about 20 years for new science to fully seep down to general acceptance, including even new medical breakthroughs. Such seems to be proving true with the alpha-wolf concept. Several



other synthesis about the wolf had been written since 1944, so The Wolf sold well. It was originally published in 1970 and republished in paperback in 1981 and is still in print. Over 120,000 copies are now in circulation. Most other general wolf books have relied considerably on The Wolf for information, thus spreading the misinformation about alpha wolves far and wide.

Finally in the late 1990s, after I had lived with a wild wolf pack on Ellesmere Island near the North Pole for many summers witnessing firsthand the interactions among parent wolves and their offspring, I decided to correct this misinformation. By then, however, both the lay public and most biologists had fully adopted the alpha concept and terminology. It seemed no one could speak about a of my wolf biologist colleagues have accepted the update, but others suddenly correct themselves in the middle of their conversations with me; still others seem totally oblivious to the whole issue. It is heartening indeed to see newly published papers such as the one I cited above in the introduction to this article that have adopted the proper terminology.

The issue is not merely one of semantics or political correctness. It is one of biological correctness such that the term we use for breeding wolves accurately captures the biological and social role of the animals rather than perpetuate a faulty view.

One place where this issue becomes particularly confusing is Yellowstone National Park, where great numbers of enjoys a great surplus of prey (6,000 to 12,000 elk, 4,000 bison, and hundreds of deer, pronghorn, bighorn sheep, moose and other prey), the pack structure of its population is more complex than in most wolf populations. There, young wolves disperse at a later age, when two to three years old instead of one to two, thus making packs larger and containing more mature individuals than most packs do elsewhere. In these packs where both the mother and some of her daughters mature, all sometimes get bred during the same year, the daughters usually by outside males.

When more than one female breeds in a pack, the females may become more competitive, so it is probably appropriate to refer to the original matriarch as the alpha female and to her daughters as "betas." The Yellowstone observers commonly use this phraseology, but too often it becomes loosely applied to all the breeding wolves, even in packs where there are only single breeders. While it is not incorrect to use alpha when applied to packs of multiple breeders, it would be possible and even desirable to use less loaded terminology. For example, the top-ranking female could be called the dominant female or the matriarch, and her breeding daughters, the subordinates. Or individually if the females actually show a dominance order, the second- and third-ranking individuals could be called simply that. This approach would further reform wolf terminology and add to both science's the public's more accurate and perception of the wolf.

Hopefully it will take fewer than 20 years for the media and the public to fully adopt the correct terminology and thus to once and for all end the outmoded view of the wolf pack as an aggressive assortment of wolves consistently competing with each other to take over the pack.

L. David Mech is a senior research scientist for the U.S. Geological Survey and founder and vice chair of the International Wolf Centre. He has studied wolves for 50 years and published several books and many articles about them.

First published in the IWC magazine www.wolf.org

## wolves of the world

news from around the world

### nibbles

Wolf sighting shows animal's return to central France. The slow return of the wolf to areas of France where it was previously considered extinct is continuing, forest rangers said, after one was spotted in the Lozere region. Wolf tracks have been found in the snow near Bondons, in the hills and forests of the Cevennes National Park 312 miles south of Paris.

Last year, park officials confirmed an aged female and a young male were roaming nearby Saint-Laurent-de-Muret. Wolves must be seen in a region for two consecutive winters before the species is considered to have returned. If confirmed the Lozere wolves would be among the deepest inside France since Italian wolves began crossing into the French Alps from Italy in 1990s, to the delight of conservationists but the dismay of farmers.

Distemper has run its course in Yellowstone wolves. An outbreak of distemper seems to have run its course in Yellowstone National Park wolves, a biologist says. Yellowstone Wolf Project leader Doug Smith says the number of wolves in the park declined from 171 in 2007 to 124 in 2008 - a 27% drop.

Smith says he expects the wolf population to recover, as it did after distemper outbreaks in 1999 and 2005. Wolf numbers dropped by 40% in the northern range, the most concentrated wolf community, from 94 wolves in 2007 to 56 last year. In the park's interior, the decline was 11% - from 77 to 68.

Distemper is a viral disease which affects respiratory, gastrointestinal and central nervous systems. Puppies are the most susceptible. Smith says the parasite mange also killed a few wolves in Yellowstone.



### **Wolves brucellosis-free**

**Blood tests** from 11 wolves recently captured in Jackson Hole show none have contracted brucellosis, a federal biologist reported. Six of the wolves live and den on the National Elk Refuge where the average brucellosis infection rate of elk since 1980 has been approximately 28%. Four other wolves captured and released after testing, live immediately adjacent to the refuge, U.S. Fish and Wildlife Service biologist Mike Jimenez said.

Brucellosis is a bacterium that causes elk and cattle to abort and is considered a scourge by stockmen. It is the source of near-incurable undulant fever in humans and is the reason milk is pasteurised.

A bill in the Wyoming Legislature earlier this winter called for testing all captured or killed wolves for brucellosis. Wyoming lawmakers, largely opposed to the presence of wolves in the state, pushed the bill only through the Senate.

Veterinarians consider canids to be largely immune from contracting or spreading the bacteria. Conservationists decried the bill as a scare tactic that would perpetuate myths about wolves. Nevertheless, Jimenez said the hullabaloo led him to begin testing trapped and killed wolves for brucellosis, starting last summer. "We've always done tests on wolves for diseases," he said. "Mainly, they are for canine distemper and parvovirus". Regarding brucellosis, he said: "From all the vets we've talked to, we didn't think that was an issue."

Jimenez began sending blood samples to a lab to test for the disease "just because everybody started bringing it up," he said. "It's not that big a deal to test for it."

The hypothesis wolves might contract brucellosis eating an elk infected with the disease, and spread it to other elk or cattle is "fairly easy to test," Jimenez said. "We're trying to use good science ... to help people understand."

Veterinarians have said it would be rare for a wolf or dog to contract Brucellosis abortus or the rare Brucellosis canis although it is possible to infect an animal under laboratory conditions, Jimenez said. Veterinarians also say a wolf would be a "dead-end host" that would not spread the disease. Even on the heavily infected refuge, resident wolves have not contracted brucellosis, the blood tests show. "If there's ever a place where wolves would have the chance for eating brucellosis-infected elk, this would be it." Jimenez said.

In addition to the 11 wolves recently tested, blood from about another dozen or so wolves were sent for screening starting last summer. Those, from across the state, all returned with negative results. "Wolves are not a player in the transmission of brucellosis, according to all the vets we've talked to," Jimenez said. Testing will continue with results routinely shared with Wyoming Game and Fish.

By Angus M. Thuermer Jr., Jackson Hole, Wyo. March 14, 2009 http://tinyurl.com/d89n9y

## Wolf shot dead after release into the wild

An endangered Mexican gray wolf from the South Salem-based Wolf Conservation Centre was found shot dead roughly two months after its release into the Arizona wilderness. The 5-year-old female, known as F836, was found dead on January 19th next to Highway 260 near Pinetop, Arizona.

"We're incredibly upset because this is what it's all about - getting these animals back to their rightful place in the wild," said Maggie Howell, the centre's managing director. "It was just unfortunate that she, I don't know, came across the wrong person."

The U.S. Fish and Wildlife Service, which is investigating, said in a news release that the wolf's body was apparently dumped next to the highway. It is a federal crime to kill an endangered animal. The wolf was found about 70 miles from where she had been released in late November with a male. The pair comprised the "Moonshine Pack," before they split apart. She was one of only about 50 Mexican gray wolves living in the wild and one of about 400 in the world. Of those, 23 are kept at the South Salem centre as part of a captive breeding program.

"We hope that the two months of being wild was good," Howell said. "It must have been extraordinary for that wolf to be able to do what she's supposed to do - no fences, no people to help her out." F836 was described as acting "elusive and evasive" at a pre-release facility in New Mexico by U.S. Fish and Wildlife officials, Howell said. Those are valuable attributes for wolves that, once free, need to steer clear of people.

The federal agency did not get any reports of people spotting the wolf while she was wandering around the recovery area, said Maggie Dwire, its assistant Mexican gray wolf recovery coordinator. "She was doing well in the wild," Dwire said yesterday. "She moved around the recovery area basically sight unseen... she was on her way to being a successful animal, likely."

Killing a Mexican gray wolf carries a criminal penalty of up to a \$100,000 fine and up to a year in prison. It also carries a potential \$25,000 civil penalty. US Fish and Wildlife Service officials said they are offering an unspecified reward for information leading to an arrest.

http://tinyurl.com/c39oxf

#### Gene pool jeopardy: can Isle Royale's wolves be saved?

Some of the most studied wolf packs in the world are in serious jeopardy. Researchers report that the occurrence of debilitating bone deformities in wolves marooned on Isle Royale, an isolated island in Lake Superior north of Michigan, has risen sharply over the past five decades due to inbreeding. A genetic defect now common in the Isle's wolves causes bones in the spine, the vertebrae, to grow gnarled and crooked. Also found in domestic dogs - close wolf relatives the bone malformations can pinch nerves in the spinal cord, causing pain that makes it tough to walk and can lead to paralysis of the back legs and tail in severe cases, according to research published in February's issue of Biological Conservation.

Back in the 1960s, about a quarter of Isle Royale's wolves appeared to have the anatomical abnormality, but now the percentage of afflicted wolves has risen to nearly 60 percent of the population. "In normal, healthy wolf populations without inbreeding, you are only supposed to see this kind of defect in about one out of a hundred animals," says paper co-author John Vucetich, an assistant professor of wildlife biology at Michigan Technological University (MTU) in Houghton. The deformity, discovered during autopsies of recovered, dead wolves, has grown so rampant, Vucetich says, "we haven't found a normal wolf in the past decade."

Vucetich is one of the project leaders of the ongoing Isle Royale Wolf-Moose

Study, along with Rolf Peterson, also a professor of wildlife biology at MTU. The project began in 1958 and has monitored the predator-prey relationship of the island's wolf packs and moose herds ever since, celebrating 50 years of study last summer. Both species are more or less trapped on the 45-mile- (72-kilometre) long isle; it is thought that some moose swam over from Minnesota around 1900, and that a few wolves reached the island via ice bridges that existed in the late 1940s. The captive populations have since developed an ecological balance: The small number of wolves (24 currently) subsists mainly on the moose that usually number around 1000. In turn, the moose rely on the wolves to help keep their population in check.

Now that the wolves' plight has come to light, the question remains what, if anything, to do about it. One option is to do nothing and let nature runs its course, however cruel that may be. An interventional option is "genetic rescue," says Vucetich, involving the introduction of an outsider wolf to the island to shake things up genetically.

Since only the alpha males and alpha females of packs mate though, the outsider would have to ascend to one of these dominant positions to ever produce offspring, Vucetich says - a tricky coup d'etat in wolf pack politics, especially for an interloper.

http://tinyurl.com/cnarje

#### Lone wolf living in Colorado

There's only one confirmed wolf living in Colorado, but a non-profit advocacy group is pinning its hopes on the lone wanderer to re-establish the predator's presence in the southern Rocky Mountains and restore balance to the region's ecosystem. The grey wolf, which has travelled an estimated 1,000 miles from Yellowstone National Park to Eagle County in search of a mate, doesn't have much of a chance of succeeding, according to wildlife experts, but Wild Earth Guardians says it doesn't have to be that way.

The group, which has offices in Denver, has been an advocate for introducing wolves into Colorado's wildlife, particularly in Rocky Mountain National Park, to help control an elk population that has decimated aspen trees and willows. "We know from Yellowstone National Park that restoring wolves actually allows the aspen and willow to begin regenerating in a very short amount of time," said Rob Edward, director of carnivore recovery for Wild Earth Guardians. "We know this region can support a robust number of wolves. It has the largest elk population in North America."

It is common for young wolves to leave packs and travel great distances in search of a mate, according to wildlife experts. "Her presence indicates there is still a tenuous connection from a habitat perspective between the southern Rocky Mountains, and the northern Rocky Mountains," Edward said. "We would want wolves wandering back and forth between the two regions."

There are no plans to introduce wolves into Colorado, but if the animals return to the region naturally, the Division of Wildlife has a management plan to protect the endangered species. Colorado State University extension wildlife specialist professor Delwin Benson helped formulate the plan and said it's likely wolves will return to Colorado sooner or later.

For the latest information on what's happening to wolves, join the Wolf Seeker Yahoo group by emailing WolfseekerNews-subscribe@yahoogroups.com



## Who's afraid of the Saxon Wolf?

Two centuries after being hunted to extinction, the wolves have returned to Germany. But not everyone is welcoming them - David Wroe heads to Saxony to track down the country's most controversial canines.

ICE CRACKS UNDER THE TYRES AS ILKA Reinhardt guns her Subaru over the frozen, rutted path that runs between a military training ground and a coal mine.



Typical wolf tracks (step in step), where the hind paw steps exactly where the front paw has been.

Reinhardt, a petite biologist in the Lausitz region of Saxony near the Polish border, is one half of Germany's top team of wolf experts. She stops the car and climbs out, having spotted some scat on the side of the road. Rarely has dung commanded such fascination or been accorded such respect.

She turns it over, examining the fur and bone fragments (wolves tear chunks off their prey and swallow them whole) before putting it in a clear plastic bag to be sent for analysis in nearby Görlitz, joining 1,600 other lupine turds the scientist has collected. Finally she records its location.

All the attention is for good reason: Reinhardt studies the numbers, movements, diet and health of the few dozen wolves that have recently established a fragile paw-hold in Germany for the first time in 200 years. From medieval times, the feared Canis lupus, or grey wolf, was hunted here and finally driven out in the 19th century, when the last packs retreated eastwards into the remote forests of Poland all the way to Russia. Now, it is back.

Scientists like Reinhardt are thrilled. But not everyone in Germany shares her enthusiasm. Between atavistic fears about the wolves made notorious by the Brothers Grimm, propaganda from the fringes of the hunting lobby and sensationalist tabloid reporting, many Saxons are convinced it's a matter of time before someone is eaten.

"If people have no experience of the real animals, all they have is the old stories like little Red Riding Hood," Reinhardt says. "Most people don't hate wolves but when they are told over and over that they are dangerous, of course, they start to believe it."



The stomach content of a wolf that was run over by a car

There are five packs in Saxony of up to eight wolves each, plus a couple of loners in neighbouring Brandenburg, making 40 or fewer in total in the entire country.

They have migrated to Germany from Poland in the past few years. The Lausitz wolves roam over the military area, dodging tanks and explosions. The Brandenburg wolves live on a disused army base littered with Soviet-era ordnance.

#### Bombs keep away hunters

'It's not that wolves like bombs', Reinhardt says, rather that these places are safe because they are free of hunters. Wolves are protected under both German and European law. But last year, two men were fined €10,000 and €4,800 respectively for shooting a wolf in Lower Saxony and are in the process of appealing. In Brandenburg, a forest ranger found the body of another young wolf killed by a bullet.

Reinhardt believes others have been shot by hunters who see them as competition for game such as deer. Farmers are compensated for attacks on their sheep and so most have accepted the wolves' return, she says.

But the motto of some hunters, she says, is: "Shoot, shovel and shut up."

Reinhardt and her business partner Gesa Kluth run Lupus, a private consulting firm that advises governments on managing the return of the predators. They help farmers protect their sheep flocks, respond to wolf sightings and educate the public.

On the other side of the public opinion battle is the hunting lobby group, Safety and Species Protection, which claims Saxony has closer to 100 wolves and that the growing packs pose a danger to people.

"Wolves are predators and therefore they are dangerous to wild animals and people because these are part of their range of prey," says the group's spokesman Christian Lissina. "In a society where people barely know that eggs come from chickens and butter comes from cows, this unfortunately gets forgotten."

#### Fear and loathing in the Lausitz

Lissina accuses Reinhardt and Kluth of preaching from the comfort of an office and of being "unscientific" even though they are both experienced wildlife biologists.

"We tried to talk to them for a while," Reinhardt says of the group. "We invited them to lectures and information sessions but after a while we were just hitting our heads against a wall so we gave up."

Wolves, like most wild animals, will avoid humans and are only dangerous if they

are routinely fed and become habituated, she says.

The mainstream hunting lobby also distances itself from the anti-wolf campaigners.

Torsten Reinwald, spokesman for the DJV German Hunting Association, branded Lissina's outfit "fundamentalist" and said his group has no problem with the return of wolves.

Nevertheless, the anti-wolf campaign has been picked up by Germany's massmarket papers such as sensationalist daily Bild.

"They write things like, 'They will eat your children'," says Steffen Butzeck, who studies the Brandenburg wolves. "The question is, do we deserve wolves? I'm not always sure we do."

#### A wolf in granny's garden?

Back in the Lupus office, Gesa Kluth puts down the phone after a half-hour conversation trying to reassure an elderly lady who thought she'd seen a wolf in her back garden.

"We are always getting calls from people saying, 'There is a young wolf and it's very bold, behaving very strangely.' So we go out with our blowpipes and tranquilisers and 95 per cent of the time, it's a dog," Kluth says.

Among other things, Reinhardt and Kluth have been accused of secretly releasing wolf cubs into the wild to boost the population.

"It's an ideology," Kluth says. "People tell us ... 'When the first child gets attacked by a wolf, it'll be your responsibility."

All they have to dismiss such fear mongering are the facts, which are so prosaic as to verge on disappointing.

Only nine people in all of Europe have been killed by wolves since World War II and five of those cases involved rabies.

#### David Wroe

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#### Mark Rowlands: the company of wolves

Susan Mansfield - The Scotsman - 22nd November 2008

**MARK ROWLANDS ANSWERS** the phone at home in Miami, his voice drowned out by barking. This is Hugo, the youngest member of the household. He is, possibly, the best trained dog in Miami, because training a German shepherd is a piece of cake once you've trained a wolf.

Rowlands has always loved dogs. His family home in Wales was rarely without one. As a child, his favourite book was White Fang, but none of this explains why, one day in Alabama 15 years ago, he answered an ad and bought a wolf.

Within half an hour the cub, named Brenin, had brought down curtains and wrecked the air conditioning unit, and Rowlands knew that his life would never be the same. For more than a decade, the wolf would be his companion. It was not only a personal attachment, it changed the way he thought - and that's important, because Rowlands is a philosopher.

It's several years since Brenin died and Rowland's book, 'The Philosopher and the Wolf', is a tribute to him. It is a book which "metamorphosed into something like an autobiography", because Rowlands knew if he was to write about Brenin, he would have to write about himself. It is also a book of philosophy; how living with a wolf can help you get to grips with what it means to be human.

"I found myself caring a lot more about it than anything else l've written. I was completely drained by the time I finished."

Brenin seemed to represent the person he was, a heavy-drinking, creative misanthrope who preferred the company of wolves. Now married, with a 16-month-old son (called Brenin), and a Professor of Philosophy at the University of Miami, Rowlands admits that he barely recognises himself.

When he bought Brenin, he was in his twenties, in his first academic job at the University of Alabama. After polishing off a PhD at Oxford, he headed Stateside.

Brenin went with him everywhere, even to lectures, because leaving him alone was a destructive disaster. His philosophy syllabus became the first in history to include the disclaimer: "Please do not pay any attention to the wolf. He will not hurt you. However, if you do have any food in your bags, please make sure that those bags are securely fastened shut."

He might never have written about our relationship with the animal world had Brenin not wrecked his jeep one ferry journey. Bored with being left, the wolf decided to eat his way out.

Leaving Alabama for Cork, Ireland, he added two further canines: Nina, a German shepherd, and Tess, half-wolf, Brenin's daughter. Brenin, meantime, masqueraded as a malamute, the status of wolves in Ireland being dubious.

There was a year in London, which saw him walking his dogs and wolves on Wimbledon Common, and sitting up late writing 'The Philosopher at the End of the Universe'. On the strength of that, he moved to France to write fulltime.

He began to ponder how the wolf sees time. Brenin, Nina and Tess, he observed, were completely content with their daily routine: the swim, the pain au chocolat, siesta, dinner in the local restaurant. Time for the wolf, he believed, was not linear, like the human, but circular. This theory gave him an insight into the meaning in our lives.



"When you look at discussions of the meaning of life, there have been two options: happiness, or purpose. The problem is neither of those really works.

"What I learned from Brenin, Nina and Tess, is the value of life doesn't have to be understood in these ways."

He believes that the meaning of life is in the moments when we are at our best.

Brenin was now ageing. He was diagnosed with cancer and became seriously ill. Rowlands nursed him knowing that his companion would die.

Against all odds, Brenin recovered, but Rowlands thinks of this "season in hell" as one of his own "highest and best" moments. "I think often, we are at our best when we realize that there is no hope.

"I suppose in one sense, the book is about loss. What we have to do is find a way to live with that."

Now, he cheerfully describes himself as "older and slower and weaker, but arguably nicer as well. It's always a trade-off, I guess."

#### The Philospher and the Wolf

Granta Books, 2008/2009 Hardback, ISBN 9781847080592 £15.99 Paperback, ISBN 9781847081025 (shown above) £8.99

#### Jim Brandenburg: Wildlife & Natural History Photographer

#### JIM BRANDENBURG HAS SEEN WOLVES

all of his life from the imagined wolves of his childhood, to the wolves he photographs in the USA and Canada. He is one of the world's most accomplished and prolific wildlife photographers of the wolf.

Born in Luverne, Minnesota in 1945, he began his career as a natural history photographer and film maker, majoring in studio art at the University of Minnesota in Duluth. He became Picture Editor at the Worthington Daily Globe in Southern Minnesota and in 1978 began his career with the National Geographic Society, where he has worked for over 30 years. His assignment work has been published in national and international publications: The New York Times, BBC Wildlife, Outdoor Photographer, etc. In June 2003 a sample of his Looking for Summer project was the first completely digital story ever issued in Outdoor *Photographer*. During this time he has produced over 23 magazine stories, over 19 books and numerous television features. His photographs have won dozens of national and international awards;

twice he has been named Magazine Photographer of the Year by the National Press Photo Association and Kodiak Wildlife Photographer of the Year. In 1991 he was given the World Achievement Award from the United Nations for "using nature photography to raise public awareness of the environment". In 1981 he was asked to photograph and design 10 wildlife stamps, and these were released on 13th May 1981.

His books about wolves are best sellers. In 1988 he published *White Wolf - Living with an Arctic Legend* (ISBN 1-



55971-093-4), an accumulation of 160 pictures from 20 years' photography. It recounts his experiences of living with a pack of arctic wolves on remote Ellesmere Island in the High Arctic. He won 10 national and international awards for the pictures. Then in 1993 he published *To the Top of the World - Adventures with Arctic wolves*. In the

same year he also published *Brother Wolf - A Forgotten Promise* (ISBN 1-55971-210-4), showing 140 photos of the timber wolves in the forests near Ravenswood, his cabin in northern Minnesota. In 1989, he produced a National Geographic / BBC television

> documentary *White Wolf* which was released to complement the book. Then in 1996 came *Scruffy* -*A Wolf finds his place in the Pack*. He is working on a video to accompany his Brother Wolf book.

As well as his publishing career, Brandenburg has two galleries located in Ely, Minnesota and his hometown of Luverne, Minnesota, and serves on the boards of directors for the Defenders of Wildlife Foundation, and the Wolf Ridge Learning Centre. He lives with his wife Judy, in the boreal forests of northern Minnesota, on the edge of a 1,000,000 acre wilderness area.

A list of his books, photographs, events, etc., can be seen on his website, which is:

www.jimbrandenburg.com

Photographs © JimBrandenburg.com Top of the World (White Wolf -Ellesmere Island, Canada) Autumn Wolf (Timber Wolf - Minnesota, USA)



176 pages, hardback, 234 x 156mm £16.99

#### **Brother Nature: Jim Crumley**

This book is an intimate and beautiful exploration of Scotland's landscapes and wildlife. The writing describes how passionate Jim is about nature but also how frustrated he is at the bureaucracy and inertia of government agencies who manage his beloved Highlands.

The book begins by looking at the past and future of the Highlands, at the flora and fauna, including eagles, otters and red kites and moves onto a section called 'The long way back'. This questions how we move away from Victorian land management ethnics to large scale holistic work including restoring the Caledonian forest and restoration of beavers and wolves. Jim sees the wolf particularly crucial in the future of the Highlands. He writes "When I go alone among wild places, I feel as if I am trying to repair an old and broken connection, a bridge between landscapes. We broke it when we exterminated the wolf'.

With the work that Paul Lister is doing in Alladale, on his estate, and Paul Cairns with Tooth and Claw, this inspiring book adds to the information and debate about the science and politics of nature conservation in Scotland and why we can't just allow wilderness to be wild.

## Biologists Solve Mystery of Black Wolves

Stuart Wolpert

Why do nearly half of North American wolves have black coats while European wolves are overwhelmingly grey or white? The surprising answer, according to teams of biologists and molecular geneticists from Stanford University, UCLA, Sweden, Canada and Italy, is that the black coats are the result of historical mating between black dogs and wild grey wolves.

The scientists used molecular genetic techniques to analyse DNA sequences from 150 wolves, about half of them black, in Yellowstone National Park, which covers parts of Wyoming, Montana and Idaho. They found that a novel mutated variant of a gene in dogs, known as the K locus, is responsible for black coat colour and was transferred to wolves through mating.

The biologists are unsure of when the black coat colour was transferred from dogs to wolves, but they believe it was not a recent occurrence; the black coat could not have spread as widely as it has throughout North America in just a few hundred years, they say. They suspect the transfer took place sometime before the arrival of Europeans to North America and involved dogs that were here with Native Americans.

"This is the first example where a gene mutation originated in a domesticated species, was transferred to and became very common in a closely related wild species," said Robert Wayne, a UCLA professor of ecology and evolutionary biology and co-author of the Science paper.

"Although genes that evolve under domestication may be transferred to wild species, they generally do not proliferate in the wild because the natural context is so different from that under domestication," Wayne said. "No one would have guessed that the common black coat colour in North American wolves came from dogs - there is no precedent for it. Moreover, for whatever reason, the transfer of the black coat-colour gene from dogs to wolves and its success in the wild occurred uniquely in North America.

#### natural selection has increased the frequency of black coat colour

"Most mutations we see in dogs have been selected by humans, and we intuitively think they are unique to dogs," he said. "We don't think of short-legged wolves like dachshunds or wild wolves that look like Dalmatians. The surprise of this study is that black wolves have their black coat coloration as a gift from dogs. The products of artificial selection had added substantially to the genetic legacy of a wild species."

Scientists have thought that coat colour is related to camouflage, perhaps to hide wolves from their prey or from one another.

"Apparently, natural selection has increased the frequency of black coat colour dramatically in wolf populations across North America," Wayne said. "It must have adaptive value that we don't yet understand. It could be camouflage, or strengthening the immune system to combat pathogens, or it could reflect a preference to mate with individuals of a different coat colour."

Does this research have implications beyond dogs and wolves?

"The underlying assumption is that genes from one species will be contained and not enter another species on a massive scale; this may not be true," Wayne said. "There may be implications for genetically modified organisms."

"This work shows how domestication can preserve and ultimately enrich the genetic legacy of the original natural populations," said Gregory Barsh, a professor of genetics at Stanford University's School of Medicine and co-author of the Science paper. "Our work is on wolves, but there are many other examples of domestic plants - wheat, rice, maize, soybean - and animals - bison, cattle, cats - where gene flow from domesticated to natural populations has been documented."

The lead authors of the paper are Tovi Anderson, a graduate student in Barsh's Stanford laboratory, and Bridgett VonHoldt, a UCLA graduate student of ecology and evolutionary biology who works in Wayne's laboratory.

As part of the research on the Yellowstone wolves, VonHoldt conducted a genome scan and studied more than 50,000 genetic markers in order to assess genetic variation across wolf populations in relation to dogs. She and her colleagues examined whether there was any evidence elsewhere in the genome indicating that black wolves

#### recently hybridised with dogs but could not find any.

Black coyotes also have the same coatcolour gene as domestic dogs, Anderson, VonHoldt and the co-authors report.

The research was conducted by laboratory and field scientists with

diverse backgrounds in conservation biology, ecology and molecular genetics.

The collaboration will help to refine concepts relevant to both genetics and conservation biology with respect to

We're trying to figure out whether the black coat colour provides a fitness or behavioural advantage

understanding how different traits arise during evolution and how biological diversity can be nurtured and maintained, the scientists said.

"My main interest is to describe the genetics of dog domestication - the geographic location of domestication and the genetic changes that led to the distinctive body forms evident in so many breeds," VonHoldt said. "I'm able to use a genome approach and look at many points along the dog genome to find interesting regions and whether these regions contain genes with known functions, and to extrapolate what that means for the domestication process of dogs.

"We're trying to figure out whether the black coat colour provides a fitness or behavioural advantage," she added, noting that Yellowstone National Park has a wealth of observational data that "we can integrate with our genetic data."

"We can scan the dog's genome and find associations between a particular marker and a trait like foreshortened limbs or a specific coat colour, or even behavioural traits," Wayne said. "We then examine the genes near those markers and identify candidates that may be responsible for the specific trait. Our hope is that we will find the genetic basis for traits having to do with behaviour, speed, longevity or fecundity all these traits that we measure in wild populations, but we do not yet understand their genetic basis."

Yellowstone is home to the wolf population about which the most is known, Wayne said. Their behaviour and reproduction have been well studied, including by one of Wayne's graduate students, Daniel Stahler, a co-author of the Science paper who works as a biologist for the Yellowstone National Park Gray Wolf Restoration Project.

"The wolves of Yellowstone represent an unparalleled population for studying the inheritance of traits," Wayne said. "In Yellowstone, we have followed very precisely the inheritance of coat colour throughout the entire wolf population and document that coat colour is a trait inherited with just one gene involved, with two forms - one causing white and one causing black. This is the most comprehensive genealogical analysis of a North American carnivore population ever undertaken."

In previous research, Wayne and colleagues used molecular genetic techniques to determine that dogs have ancient origins, and that the first Americans to arrive in the New World more than 12,000 years ago brought domesticated dogs with them. They have also found that dogs have been living in close association with humans much longer than any other domestic animal, have confirmed that dogs evolved from wolves, and have confirmed that today's domestic horse resulted from the interbreeding of many lines of wild horses in multiple locations and was not confined to a small area or a single culture.

#### Stuart Wolpert

University of California - Los Angeles

Main picture of the UKWCT's Mosi and Mai by Ken Lloyd

Top right: Mai by Denise Taylor



## New wolfie clothing from UKWCT





 Soft-coated grey wolf

 medium
 16cm
 £5.50

 large
 25cm
 £11.00

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#### Life in a Pack -Wolves Richard & Louise Spilsbury The animal group is explored - how is

it made up and what happens in the group? Paperback; 32 pages; 189 x 240 mm **£6.99** 

Wolfie Gifts for Children



#### Wolves Karen Wallace Follow the story of a wolf

story of a wolf pack and how they stick together to

live and hunt. Learn about the grey wolf's sharp senses, amazing memory and ferocious hunting skills. Paperback; 32 pages; 129 x 198 mm **£3.99** 

#### Wild World: Wild Wolves Karen Dudley

Wild Wolves covers folklore and classic stories as well as scientific topics such as classification and distribution. A must for

young researchers. Paperback; 64 pages; 203 x 253 mm **£5.99** 



## UKWCT Events Calendar

### JUNE

Monday 1: Tuesday 2: Wednesday 3 : Thursday 4: Saturday 6: Sunday 7: Monday 8: Tuesday 9: Monday 10 : Friday 12: Sat 13 / Sun 14: Monday 15 : Thursday 18: Friday 19: Saturday 20 : Sunday 21: Monday 22 : Tuesday 23 : Wednesday 24 :

Thursday 25 :

Sat 27 / Sun 28 :

Leighton Park School visit Leighton Park School visit Leighton Park School visit Private Walk Private Walk - Walkabout Dog Training Club Members' Walk - full Solihull College visit School visit - wolves to St Barts, Newbury Private walk Private walk - Mammal Trust Members' Walks - full Daneshill School visit Nescot College visit Littledown School visit Members' Walk - full Father's Day walk (see page 24) Pastel Workshop (see page 24) Private Walk Englefield School day - wolves to Englefield Estate Private Walk - Wiltshire Wildlife Trust Members' Walks - full



### AUGUST

Saturday 1 : Sunday 2 : Monday 3: Tuesday 4 : Friday 7 Saturday 8 : Sunday 9: Wednesday 12 : Friday 14 : Sat 15 / Sun 16 : Tuesday 18: Wednesday 19 : Friday 21: Saturday 22 : Sunday 23 : Tuesday 25 : Friday 28 : Saturday 29 : Sunday 30 : Sunday 31:

Members' Walk Members' Walk Beenham Wolves School Holiday Club visit Children's Wolf Keeper Day (see page 24) Children's Wolf Walk Members' Walk Private Walk - Spice Adult Wolf Keepers Day Children's Wolf Walk Members' Walks Reptiles, Creepy Crawlies & Wolves (see page 24) Children's Wolf Keeper Day (see page 24) Mammal Trust Children's wolf walk - private Members' Walk Private Walk - Harley Davidson Club Children's Wolf Walk (see page 24) Children's Wolf Walk (see page 24) Members' Walk **Chapel Row Fayre** Members' Walk Open Day 11am-5pm (see page 24)



Torak with Alex Simmons and Andrew Stokes by Kirsty Peake

### JULY

Wednesday 1 : Friday 3 :

Saturday 4 : Sunday 5 : Monday 6 : Tuesday 7 : Wednesday 8 : Thursday 9 : Friday 10 : Saturday 11 : Sunday 12 :

Wednesday 15 : Thursday 16 : Friday 17 : Saturday 18 : Sunday 19 : Tuesday 21 : Wednesday 22 : Saturday 25 : Sunday 26 : Monday 27 : Thursday 30 : Friday 31 :

School visit - wolves to Caversham Primary School Members' Walk Badger Talk (see page 24) Private Walk - Spice Members' Walk Christ's College, Guildford visit 1st Thatcham Cubs visit Christ's College, Guildford visit 4th East Barnet Scouts visit Howl Night (see page 24) From Predator to Pet : Workshop (see page 24) Members' Walk - full Members' Walk Thatcham Photographic Club Private Walk - Wiltshire Wildlife Trust 1st Reading Cubs visit Members' Walk Open Day 11am-5pm (see page 24) Home Schoolers Group visit **Engaging Potential School visit** Members' Walk Members' Walk Mammal Trust Children's wolf keeper day - private Theale Green School visit Children's Animal Tracking Event (see page 24)



For details & availability visit www.ukwolf.org | All dates are correct at the time of going to press

## Forthcoming Events at the UKWCT

### Summer Holiday Children's Events

**4th & 19th August: Children's Wolf Keeper Days** 10am - 3pm. Come dressed to get mucky and see what the wolves and their keepers get up to during the day. £25 per person. 10 years +

7th, 14th, 25th and 28th August: Children's Wolf Walks 11am - 1pm

Take a walk with the UKWCT wolves. Includes a short talk and tour of the centre. £12 per person, 6 years +

#### 31st July: Animal Tracks 10am - 12noon

Learn some of the skills of the tracker and open up a whole new world. Try some different ways of moving silently and getting closer to wildlife (be prepared to get dirty!) and find the tracks of animals, including the wolves, and find the story in the tracks. For children 8 years +, parents welcome as well but not essential. £10 per person. **18th August: Reptiles, Creepy Crawlies & Wolves** 11am - 1pm Come and see giant African land snails, a Madagascan hissing cockroach, African millipede, a tarantula, and lots more in this fun, fact-filled talk with lots of animals that the children can get up close to and even touch. You will also have a tour of the centre to see the wolves in their enclosures. For children 6 years +. £10 per person.

### Badger Talk - 3rd July, 7pm



Come and learn all about the world of the badger, its life underground and its habits, with Jeff Hayden from the **Badger Trust**. You will be able to watch live video footage of our own, very active badger

sett and hopefully see some of the shy creatures in their native habitat. £5 per person.

## Howl Night

This is a very popular event at the Trust. The evening will start off with a talk on wolves and their different methods of communication, focusing mainly on their various vocalisations. You will also have the opportunity to let out a howl and see if the wolves respond!



10th July at 7.00pm

£10 per person

(Don't forget to dress up warmly for an evening under the stars.)

## The UKWCT Proudly Presents **FROM PREDATOR TO PET**

(Wolf to Woof!)

#### Saturday, 11th July, 10am - 2pm

Join us for a fast-moving interactive workshop, developed in conjunction with Wolf Park Indiana, charting the evolution of man's best friend.

#### The day includes:

Workshop • free gift • walk with an ambassador wolf Book early to avoid disappointment • Tickets only £50

### Fathers' Day Walk - 21st June

What do you get the father who has everything? How about coming on our special Fathers' Day Walk?

The event includes a short talk and a walk with our wolves, as well as an opportunity to have a photo memento and refreshments. Children must be 12+

Sunday, 21st June from 10.30am to 1.00pm £30 per adult, £10 children (12\_to 16).

### **UKWCT WOLF CENTRE OPEN DAYS**

19th July & 31st August 2009 • 11am - 5pm

£5 for adults and non-members £3 for members and children under 12

 Look around the Wolf Trust • Photography sessions both from the platform and from the mound•
 Ask the experts about living with wolves • Watch the

wolves being given meds • Listen to them howling • Children's activities available • Badger talks • Nature Trail

Pond Dipping • Refreshments available.

For more information visit our website: www.ukwolf.org

#### Pastel Workshop with Vic Bearcroft

#### Monday, 22nd June 2009

 Introduction and talk by UKWCT staff, followed by a visit to meet the wolves.

- Photo opportunities; your very own reference material!
- All tuition and individual guidance throughout the day
  - All art materials provided
  - A live auction of a limited edition wolf print, with all proceeds donated to UKWCT

If you would like a brochure about the workshop, or any further details, please contact Vic or Liz on 01636 651699 or email vicbearcroft@tiscali.co.uk

#### For more information visit www.ukwolf.org | To book call 0118 971 3330