Dream Dog from the South
An information brochure from Parasitus Ex e.V.

Important tips and information about the south dog

Focus on Leishmaniasis, Ehrlichiosis & Co.

Some pathogens now also in Europe

3rd edition updated
Why chose a Mediterranean dog?

In the face of full animal shelters it seems at first sight paradoxical in this country, that dogs are imported from abroad.

For why is there such a large “market” for Mediterranean dogs? Nowadays when looking for a dog in the nearest animal shelter, often the small, cute and young dogs are absent, instead what can be found is the larger, older dogs and so-called fighting dog breeds. Is there any wonder prospective dog owners search abroad?

Dogs are increasingly being searched for and mediated over the Internet. Dog breeders can get rich quickly by advertising those sought after young, small-medium sized foreign breed dogs. Additionally searching dog enthusiasts get rich with the foreign dogs: small and medium-sized dogs are frequently on offer to respond to the surge in demand.

Once the dog has travelled to the south, who knows the misery it may face. The unchecked increase of the street dogs leads to gluts of unwanted puppies. The sight of maltreated and hungry animals or simply just the description, on an internet site, tugs on the heart strings of prospective dog owners and encourages them to want to help their four-legged friends from foreign countries. Additionally where sympathy lies, a caring nature will often follow.

So that your new dog can become the dream dog for you, you should know some important things and also satisfy the most important prerequisites yourself.

It is advisable to be cautious if the arrangement proceeds too easily. If therefore after only a short telephone call for payment the dog is simply yours, it is questionable, whether the mediating person is really acting in the dog’s best interests.

Enquire about the exact background of the animal. Not all dogs which come from bad settings are happy about a place in a German living room. If the dog in question had no ties with people and no contact with other dogs, it’s possible that he/she may find their new setting difficult.
Many adult Mediterranean dogs are survivors. They have found their daily food by rooting in waste or by hunting. Often permanently on the move and surrounded by an ever-changing group structure, has meant that they socialize favourably with other dogs, but are also very independent.

It is often assumed that most foreign dogs were roamers once, which have lived in the open street. However in reality many come from far worse conditions. Guard-dogs, sound dogs or simply lone survival dogs, it is these helpless dogs which are numerous and deemed surplus which are released onto the streets to fend for themselves. Often unable to survive they then end up in ‘killing stations’ or ‘animal shelters’ where they live in poor conditions, packed tightly together with other dogs and consequently become permanently stressed due to the lack of cage space.

All these dogs have developed strategies to survive in their environment. It is often these strategies which prove troublesome when they are moved to Germany.

Often men or children who lack experience with these kinds of dogs may become fearful of their behaviour. The dogs behaviour towards animals or other dogs, its in-built hunting behaviour or permanent fight for food, has meant they have developed a strategy which is not always acceptable in a human family setting. The new owner may not understand this and wishes to enforce a more harmonious living together strategy which the dog is untrained to accept.

It is because of this that a thorough assessment, prior to ownership, is vital to address any foreseeable problems.

**Our recommendation:**

Before the arrangement, ask exactly:

- Where does the dog come from?
- How has it grown up?
- Has it had contact to people as a puppy?
- How does it behave with other dogs?
- Was it ever used for hunting?
- Was it ever appointed for protection or as a watchdog?
- Where has it lived prior to the arrangement (foster home or animal shelter)?

It may not be possible to get answers to all your questions; however you should aim to obtain as much detailed information as possible from a respectable mediator. Describe your circumstances and enquire about whether the dog matches you and your family. In principle, you should mistrust a fast “yes”. Enquire whether a house check is carried out. If not, question whether it is a serious arrangement with the dog’s best interests at heart!

Stress is another factor which can lead to behavioural problems. Moving to a new home is a basic change of circumstances for the foreign dogs. This in itself is stressful and can lead to problem behaviours, especially as the newcomer will probably be unfamiliar with the language, and hence basic commands may be difficult to understand. Enquire about what exact experiences the dog has had and let yourself be advised. Also analyse the tips given to you, if you are unsure.
Most foreign dogs are masters in changing by their previous learning experiences and survival strategies. You are very adaptable, extremely sensitive and also very fast frequently study. What can be the reason for problem behaviours on one side is the best prerequisite on the other side that the four-legged increase learns a team capable behaviour from you from abroad and the most grateful companion whom one can imagine is after short time!

However, you must also be prepared for when the dog arrives. They may require a lot of training. You may question whether you ready and able to help a traumatized animal recover from its past and adapt to a completely new life. It will require time and patience to deal with the dogs behaviours, you may need to read books and even spend money on professional help if necessary. But do not be put off by the challenge, it can be very rewarding!

Some hound breeds are more popular candidates for importation from southern countries. For example Podencos, Galgos or other greyhound cross-breeds. Many of these dogs live in wretched conditions; they are frequently kept in shacks and released only for hunting to flush rabbits or wild boars out. Afterwards, provided that one can capture them again, they are returned back to the shack. Hence a hunting education does not allow much socialization with people.

These dogs, once imported, may develop into quiet, clinging, affectionate animals in the German living room. However they often retain that strong hunting drive outdoors. It is possible that exercising such a dog may only be done on a leash in public areas.

Your dog is in Germany and in some cases, may already be living in a foster home which has assessed the dog’s behaviour. It is settled and may have also received any necessary veterinary care. Many foster homes already have great experiences with Southern dogs and know ‘your’ dog quite well. Take their advice with regards to behaviours.
Perhaps you found your dog in a German animal home instead. The employees should be able to give you all the necessary information about your dog, and advice you accordingly. You also have the possibility there of getting to know the dog first before re-homing.

Sometimes you may have to collect the dog directly from the airport or from the society for the prevention of cruelty to animals. Your dog is then particularly dependent on your help, requiring care and attention during its first acclimatisation phase. It is important that you have the support from both the animal rights group which you got the dog from and of a good veterinary surgeon.

In every case you should consider staying at home during the first weeks with your new dog, until it has settled in.

In Southern and Eastern Europe some illnesses exist which many people (including veterinary surgeons) are unfamiliar with. Some of these illnesses are untreatable and fatal to dogs or can cause severe health problems. Additionally some illnesses can also be harmful to humans, particularly young children.

It is regrettable that many mediators, both private people and regular societies for the prevention of cruelty to animals are not educated about these illnesses. Some are simply unaware and do not know, others hide it consciously in order to speed up the arrangement.

Here we will introduce the most important illnesses that you should be aware of and may consider testing your dog for. If mediators tell you tests have already been carried out, ask to see the written results. Take care that a reputable laboratory has been used, ensuring that the right tests have been carried out and not one of the much more unreliable express tests.

Fortunately not all dogs from the South are ill. However, there are regions in which a very high percentage of all dogs are infected, especially with Leishmaniasis for example.

You can find more detailed information about all mentioned illnesses and the journey to prophylaxis on the internet page: http://www.parasitus.com

In emergencies also per E-Mail: info@parasitus.com
Leishmaniasis is a very serious problem in Southern Europe today. The Leishmaniasis situation has increased dramatically in the Mediterranean area within the last 20 years. Regional high percentage figures of infected dogs are known:

- France (Provence) 66%
- Italy (Sicily) 60%
- Greece (Peloponnese) 22%
- Portugal 20%
- Spain (Andalusia) 42%
- Spain (Majorca) 52%

These percentage figures of infected dogs speak for themselves; we shall therefore discuss Leishmaniasis in depth. Currently Leishmaniasis is still regarded as un-curable in dogs, the mortality rate for infected dogs is very high. At present, a vaccination does not exist. One assumes today that there are approx. 2000 infected dogs in Germany with Leishmaniasis, which were either imported from the Mediterranean or have been infected during travel.

**The pathogene:**
Leishmanias are protozoa (unicellular organisms). They reside in the white blood corpuscles (eating cells) mainly in the bone marrow and damage internal organs like liver, spleen and kidneys. The only pathogen in Mediterranean Europe is *Leishmania infantum.*

**The carrier of the Leishmaniasis:**
Leishmanias are transferred by the sting of sand gnats. Only the female gnats suck blood. Of the 23 different sand gnats known in the Mediterranean, the most common ones transferring Leishmanias to human and dog are *Phlebotomus perniciosus, P. ariasi* and *P. neglectus.*

**Fact sheet Phlebotomus spp.:**
Sand gnats or Phlebotomen are very little gnats; approx. 2 mm in length and approx. 0.5 mm breadth. Sand gnats have got their name because they are sand-coloured. Sand gnats do not develop in water but instead brood in the damp ground. The larvae of the sand gnats live on organically subversive material. As a result sand gnat biotopes or breeding grounds are often in the surroundings, never on the beach.
The wintering of sand gnats is carried out during the larval stage in Europe. If the nights get milder, the sand gnats pupate themselves. If night temperatures then exceed 20° degrees Celsius, the adult sand gnats hatch out. The “sand gnat season” starts for Northern Italy, Northern Spain, France and Greece at approximately the end of May and lasts until the middle of October. In Southern Italy or Southern Spain sand gnats fly as early as the end of April and have occasionally been found into late November. On their search for blood the female sand gnats begin flying at exactly an hour after sunset and stop an hour before sunrise.

The symptoms of a Leishmaniasis:

The symptoms in dogs are very variable. Weight loss, general weakness, diarrhoea and vomiting, amplified claw growth, hair loss and skin eczemas are just some of the more common symptoms seen. The veterinary surgeon also frequently diagnoses spleen enlargement and inflammation. Outward appearances like skin changes are secondary expressions and point to an advanced inner Leishmaniasis.

Is there a danger for people?

Leishmaniasis is a zoonosis and can be transmitted to humans by the bite of a sand gnat. Leishmania infantum usually does not lead, with adults, to a syndrome unless there is current immunodeficiency, such as HIV infections. Diabetics and transplant patients, as well as children up to five years are at increased risk of falling ill, especially if they holiday in the South. Infected dogs with open eczemas should not be allowed in contact with small children. The transmission path by contact with the sore secretion of infected dogs is being researched, but to date there have been no confirmed cases. Transmission of Leishmaniasis by dog bites, saliva or fresh blood is improbable. A transplacental transmission (infection in the womb) is possible.

The distribution of the Leishmaniasis in Europe:

Depending on the distribution and density of these sand gnats the Leishmaniasis contamination varies throughout Europe and therefore varying numbers of people and dogs are infected. Sand gnats occur in Austria, Switzerland, the complete Mediterranean, Portugal, Germany (Baden-Wuerttemberg and Rhineland-Palatinate). The first sand gnats were also found in the South of Belgium.

The prevention

Synthetic Pyrethroids seem to repel and kill sand gnats. They are available in modern commercial spot-on preparations.
A conventional mosquito net does not offer protection from sand gnats. These gnats are so small that they can fit through a mosquito net. The flying times of the sand gnats have to be taken into account. Sand gnat biotopes have to be avoided at night; in a direct beach proximity no sand gnats can be found.
Within the last few years, Ehrlichiosis is being diagnosed more and more in dogs which are from Mediterranean foreign countries or who have stayed there with holidaying owners. Interestingly symptoms like nosebleeds can appear years after a stay abroad.

The pathogene:
The pathogen causing Ehrlichiosis is *Ehrlichia canis*; a rickettsial bacteria belonging to the family Ehrilichiaceae. They infect the white blood corpuscles (monocytes) and multiply inside them.

The carrier of the Ehrlichiosis:
Ehrlichiosis is transferred by the bite of the brown dog tick (*Rhipicephalus sanguineus*).

Fact sheet *Rhipicephalus sanguineus*:
The brown dog tick (*Rhipicephalus sanguineus*) can be found in all European Mediterranean countries including Portugal southward as of Central France.

The further one goes to the south, the more frequent it is to find the brown dog tick, and they are active year-round. This tick has the unpleasant quality of running towards its victims at a speed of 1 m/min.

This species of tick is also known as the “holiday gift”, its presence increases in warmer areas of Germany.

The distribution of the Ehrlichiosis in Europe:
Ehrlichiosis can be found anywhere where the brown dog tick (*Rhipicephalus sanguineus*) is found and this is as far as Central France, southward in all European Mediterranean countries, inclusive of Portugal.

The symptoms of an Ehrlichiosis:
Ehrlichiosis symptoms include weariness, inefficiency and in-appetence in the dog. Nosebleeds are a common symptom in the later course. Also dot-like bleedings are seen on the mucous membranes and on the skin. Blood in the excrement, urine, haemoptysis and haematomas in the joints as well as high fever and swelling can also occur. The lack of thrombocytes (platelets) is responsible for the bleeding inclination. An untreated Ehrlichiosis can cause renal failure, due to the bleeding tendencies, as well as eventual death.

The prevention:
A commercial Spot-On preparation containing permethrin acts to repel and kill Dermacentor and Rhipicephalus ticks.
There is a danger for people?
An infection in man is known as HME (Human Monocytic Ehrlichiosis). Transmission from dog to man is improbable by direct blood contact, however it is conceivable.

**Babesiosis**
*(Piroplasmosis, „dog malaria“)*

The Babesiosis or “dog malaria” is the most dreaded illness in France. According to information from local veterinary surgeons up to 500,000 infections occur per year in France. A vaccine exists, it is however very hard to purchase in Germany. For more than 20 years Babesiosis has been present in Germany. The first cases from the Netherlands became known in 2004.

**The pathogene:**
The Babesians are also protozoa (unicellular organisms.) Similarly, like the pathogen of human malaria, the Babesians live in the red blood corpuscles and destroy them. There are currently two known Babesiosis pathogens which infect the European dog: Babesia canis and Babesia vogeli.

Babesians to the dog when they feed on their blood.

**Fact Sheet Dermacentor reticulatus:**
The marsh tick (*Dermacentor reticulatus*) is a member of the ‘coloured ticks’ and is recognised by the marbled markings on its back. This species of tick seems very frequent to Northern Italy, Croatia, France and Northern Spain.

Within the last few years this species of tick has appeared in Germany, even on mild winter’s days, on a massive scale. It has year-roundly activity but high peaks of activity occur in March, April, September and October.

**The prevention**
A commercial Spot-On preparation containing permethrin acts to repel and kill Dermacentor and Rhipicephalus ticks.

**The carrier of the Babesiosis:**
The tick species of *Dermacentor reticulatus* (cow, coloured or marsh tick) and *Rhipicephalus sanguineus*
The distribution of the Babesiosis in Europe:
Babesiosis occurs in all European Mediterranean countries including Bulgaria, Romania, Hungary, Switzerland and Portugal. Confirmed cases have been found in Germany (Freiburg, Stuttgart, Munich, Regensburg, and Siegen) and in the Netherlands (The Hague, Arnhem). However, there still remain many areas where infection status is unknown.

The symptoms of a Babesiosis:
A high fever occurs about one to three weeks after an infectious tick bite. Dark urine may also be seen. Babesiosis frequently leads to death of the animal, particularly in the acute phase. Once the dog becomes pyrexic (high fever), weariness, lack of appetite, weight loss and frequent jaundice follow. Also inflammmable changes of the eyes as well as detachments of the retina can appear. In the further course the central nervous system can be damaged. Movement disorders and epileptic seizures then can appear.

Is there a danger for people?
No danger exists from Babesia canis or Babesia vogeli for man.

Anaplasmosis I
[Granulocytic Ehrlichiosis]

The nineties started with the history of Anaplasmosis in the north and middle Central Europe. One knows today that the granulocytic Ehrlichiosis in man, the horse Ehrlichiosis, the grazing fever in cows and sheep as well as the granulocytic Ehrlichiosis in dogs all have the same pathogen: Anaplasma phagocytophilum.

The pathogene:
The pathogen of the Anaplasmosis is Anaplasma phagocytophilum. The Anaplasmas are bacteria and belong, as the Ehrlichia do, to Rickettsial bacteria. They affect the white blood corpuscles (the granulocytes) and multiply inside them.

The carrier of the Anaplasmosis:
Anaplasmosis is transferred by the bite of the wood tick (Ixodes ricinus).

Fact sheet Ixodes ricinus:
The wood tick (Ixodes ricinus) belongs to the signpost ticks and is active during outside temperatures of approx. 10°C.

Is there a danger for people?
No danger exists from Babesia canis or Babesia vogeli for man.

Anaplasma phagocytophilum as a morula in one granulocytes of a dog.

Ixodes ricinus, male

This tick can be found all year round in Germany, even on mild winter’s days. Up to 120 Ixodes ricinus ticks per square metre have been found in the forest soil of the seven mountains in North Rhine-Westphalia.
Ixodes ricinus, 2 females

The wood tick lives mainly in woods and areas surrounding woods. The adult ticks have been found frequently on the top of blades of grass waiting for their victims. These ticks migrate depending on atmospheric humidity up to a height of 1 metre off the floor.

If a dog or man brushes past the blade of grass, an adult wood tick female will latch onto its skin. They then usually take several hours walking on the victim’s skin to find a suitable biting place. Once this place is found, the tick sucks blood for up to seven days.

The symptoms of an Anaplasmosis:
Anaplasmosis is an illness very similar to Ehrlichiosis. It manifests with the same symptoms as already mentioned for Ehrlichiosis, in addition to being a non-specific illness with fever. Furthermore, symptoms such as weight loss, diarrhoea and vomiting can occur. Lameness may sometimes be observed as a result of arthritis.

Is there a danger for people?
An infection in man is known as HGE (humane granulocytic Ehrlichiosis). A transmission from dog to man is improbable, by direct blood contact, however still conceivable.

The prevention
For protection against Ixodes ticks, commercial Spot-On preparations are available containing permethrin or Deltamethrin collars are a suitable alternative.

The distribution of the Anaplasmosis in Europe:
Anaplasmosis can be found in places where one finds the wood tick (*Ixodes ricinus*) and this is between the 40th and 65th degrees of latitude everywhere. Germany therefore lies in the middle of the wood ticks range. Anaplasmosis is also known in Sweden, Norway, England, The Netherlands, Poland, Hungary, Austria, Switzerland, the Czech Republic, Slovenia, Croatia, Bulgaria, France, Northern Spain and Northern Italy.

Anaplasmosis II
Infectious Canine Cyclic Thrombocytopenia (ICCT)

A few years ago a new Anaplasma pathogen emerged in Southern Europe: *Anaplasma platys*.

The pathogene:
The *Anaplasma platys* also belong to the Rickettsial bacteria and affect the thrombocytes (the platelet).
The distribution of *Anaplasma platyts* in Europe:
At present, this pathogen is known in Spain, Gibraltar, Italy, Greece, central and South Portugal, as well as in the South.

The symptoms of *Anaplasma platys*:
This illness appears with all the same symptoms as described under the Ehrlichiosis and Anaplasmosis I.

Is there a danger for people?
It is thought there is no danger of humans contracting *Anaplasma platys*.

The carrier *Anaplasma platys*:
This Anaplasmosis is transferred by the bite of the brown dog tick (*Rhipicephalus sanguineus*).

The carrier of the hepatic Zoonosis:
Hepatic Zoonosis is transferred by *Rhipicephalus sanguineus* (brown dog tick) by swallowing or chewing.

The distribution of the hepatic Zoonosis in Europe:
Hepatic Zoonosis is seen more and more in dogs which are from the Balearic Islands, Canary Islands, Portugal and Southern Spain. With the increase in importing dogs this pathogen is also known to occur in Thessaloniki - Greece, Marseilles - France, Alicante and Malaga – Spain.

The symptoms of a hepatic Zoonosis:
The clinical symptoms vary greatly: fever, anaemia, emaciation, lymph node enlargement, nose and eye discharge, bloody diarrhoea, muscle weakness, stiffness as well as epileptic like seizures can appear. With heavy infections the dog inevitably dies because of the organ damage/failure.

Is there danger for people?
Hepatozoon canis is not known to cause an infection in man.

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Hepatic Zoonosis

Hepatic Zoonosis is an example of quite a new illness in Europe. This illness originated from Africa and obviously was transported by ship to the ports of Europe. It is now common in many rural regions of Southern Europe.

The pathogene:
The pathogen of Hepatic Zoonosis is *Hepatozoon canis* and is part of the coccidians. The tick borne parasite is not transmitted by the tick feeding on the dogs blood; instead the complete tick must be chewed or swallowed, a typical feature of coccidians. The Hepatozoon drills through the host’s intestinal wall and enters the blood stream. It travels to the kidneys, lymph nodes, spleen, bone marrow and liver. The white blood corpuscles (leukocytes) are finally affected.
Filariases

The most important filarial species in the dog is heart worm; however other types of filarial species are known to establish themselves in the connective tissue, in the skin or in different organs. In Europe 5 different filarial species infect the dog.

The pathogene:
Worms, e.g. Dirofilaria immitis (heart worm) or Dirofilaria repens (skin worm). At first these are transferred as tiny larvae (L3) in fleas, gnats or ticks when they feed on the dog's blood. After about 6 months migrating through the dog's body, dependent upon the worm in question; they either reach the heart, lungs and other organs, as macrofilariae, or the connective tissue or the skin. These macrofilariae release microfilarias (L1) into the blood with which the carriers are then infected.

The distribution of filarias in Europe:
Filarias can be found in all of Southern Europe, some Eastern European countries, Switzerland as well as in South Germany.

The symptoms at Filarial infection:
Some dogs may show none/few symptoms, whilst others show more. These include coughing, weight loss, and weakness, difficulty in breathing, skin elevations and eczemas.

Danger for man?
The filarial species Dirofilaria repens is dangerous for man.

The carrier of the filarias:
Filarias are transferred by fleas, louse, flies, ticks or various gnats. It depends on the filarial as to which carrier is used.

The prophylaxis

For a journey prophylaxis a commercial Spot-On preparation is suitable, these kill microfilarias already present in the dog with the active agent Moxidectin.
The most important points summarized:

Never take an untested animal. Be sure to confirm that any results you do see are from the actual animal you wish to have.

Today, many available tests are not one hundred percent reliable. It happens, that despite all caution an illness is still diagnosed months to years after the new dog had that photo taken which advertises them. Remind yourself that an ill dog takes up lots of time, money and nerves. If you have doubts, then it is preferable not to take the dog.

And finally …

… if you would like to give a dog a new home from abroad, be sure to follow the check list and take it with you on the search for your dream dog. It will help you to distinguish slippery profiteers from responsible animal lovers who honestly mean it with you and with the dog.

Check list

Our check list for choosing and importing an as healthy as possible dog from a foreign country.

The more points from this list that are filled, the bigger the probability that you will find a healthy four-legged friend.

Fundamental:

You and all members of the family should approve of a dog. You must have the time, place and the financial resources to keep the animal. You are clear that you would like to provide the animal with lifelong care, it is particularly important for an animal with a sad past history not to have to change hands again so you must be committed. Also make sure your landlord/if necessary the household community also agrees!

Clarifying at the making contact with the mediating place:

✓ The suggested dog is already in your native country and can be visited before the final decision and got to know at your leisure. This also means that you must act quickly because other people may be interested in the animal.

✓ The mediating place supports you after the arrangements have been made and also takes the animal back if necessary.
In principle, the mediating place should carry out a home check to look at the size of the house, garden etc. This should be done before an animal is found for you and is of great importance as it makes sure that the animal is suited to you (maybe you do not have plenty of time for the animal, children/age of the children, your age to age and size of the dog etc.). This also shows you the care with which the animals are being arranged and suited to their new owners!

Clarify if you go to the dog for the first time:

The animal is in a neat condition and seems well. Examine the fur, skin and health status of the dog; make sure the animal is not too lean. Pay attention to places with hair loss on, eczema, discharge from eyes and nose, inflammation in the mouth and overgrown claws. Paralysis, very bent back, coughing and sneezing, like all the other symptoms possibly indicate serious illnesses. Do not be fooled if they tell you that the dog “has caught a cold on the flight” and everything will be better after an Antibiotic therapy already ordered! This may be the case, but then, one should submit the animal to you when it is well again.

Imprint

The charitably recognized organization leads research projects in infectious diseases “all over”, among other things. Parasitus Ex e.V. is a registered association which cooperates worldwide with cooperation partners like scientists and universities to aid organization for the promotion of the fundamental research of infectious diseases with animals, additionally it advises animal owners concerned and their veterinary surgeons and provides information by publications and lectures.

Association address: Parasitus Ex e.V., Vollbergstr. 37, D-53859 Niederkassel, Germany
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Any donation, no matter how big or small can help us make one step in the right direction for both dog and mankind!

A warm thank-you in advance.

**Further information:**  
http://www.parasitus.com

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We cannot take on any liability for completeness or correctness of this booklet. Please, if in doubt (concerning the illnesses introduced here and illnesses which are not mentioned on here particularly, rare and localized) ask a veterinary surgeon with experience in travel illnesses.

You can also find the booklet as a download, visit: www.parasitus.com

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