

= Western jackdaw =

The western jackdaw ( *Corvus monedula* ), also known as the Eurasian jackdaw , European jackdaw , or simply jackdaw , is a passerine bird in the crow family . Found across Europe , western Asia and North Africa , it is mostly resident , although northern and eastern populations migrate south in winter . Four subspecies are recognised , which mainly differ in the colouration of the plumage on the head and nape . Linnaeus first described it formally , giving it the name *Corvus monedula* . Later analysis of its DNA suggests that it , along with its closest relative , the Daurian jackdaw , is an early offshoot from the genus *Corvus* , and possibly distinct enough to warrant reclassification in a separate genus , *Coloeus* . The common name derives from the word " jack " , meaning " small " , and " daw " , the native English name for the bird .

Measuring 34 ? 39 centimetres ( 13 ? 15 in ) in length , the western jackdaw is a black @-@ plumaged bird with a grey nape and distinctive pale @-@ grey irises . It is gregarious and vocal , living in small groups with a complex social structure in farmland , open woodland , on coastal cliffs , and in urban settings . An omnivorous and opportunistic feeder , it eats a wide variety of plant material and invertebrates , as well as food waste from urban areas . Western jackdaws are monogamous and build simple nests of sticks in cavities in trees , cliffs , or buildings . About five pale blue or blue @-@ green eggs with brown speckles are laid and incubated by the female . The young fledge in four to five weeks .

= = Systematics = =

= = = Etymology = = =

The western jackdaw was one of the many species originally described by Carl Linnaeus in his 18th century work *Systema Naturae* . Owing to its supposed fondness for picking up coins , Linnaeus gave it the binomial name *Corvus monedula* , choosing the specific name *m?n?d?la* , which is derived from *moneta* , the Latin stem of the word " money " . The genus *Coloeus* , from the Ancient Greek ???????? ( *koloios* ) for jackdaw , was created by Peter Pallas in 1766 , though most subsequent works have retained the two jackdaw species in *Corvus* .

The original Old English word ??o ( pronounced with initial ch ) gave modern English " chough " ; Chaucer sometimes used this word to refer to the western jackdaw , as did Shakespeare in *Hamlet* although there has been debate about which species he was referring to . This onomatopoeic name , based on the western jackdaw 's call , now refers to corvids of the genus *Pyrrhocorax* ; the red @-@ billed chough ( *Pyrrhocorax pyrrhocorax* ) , formerly particularly common in Cornwall , became known initially as the " Cornish chough " and then just the " chough " , the name transferring from one species to the other .

The common name jackdaw first appeared in the 16th century , and is thought to be a compound of the forename Jack , used in animal names to signify a small form ( e.g. jack snipe ) , and the archaic native English word daw . Formerly , western jackdaws were simply called " daws " . The metallic chyak call may be the origin of the jack part of the common name , but this is not supported by the Oxford English Dictionary . Daw , first used for the bird in the 15th century , is held by the Oxford English Dictionary to be derived from the postulated Old English *dawe* , citing the cognates in Old High German *t?ha* , Middle High German *t?he* or *t?chele* , and modern German *Dahle* or *Dohle* , and dialectal *Tach* , *Dähi* , *Däche* and *Dacha* .

Names in English dialects are numerous . Scottish and north English dialects have included *ka* or *kae* since the 14th century . The Midlands form of this word was *co* or *coo* . *Caddow* is potentially a compound of *ka* and *dow* , a variant of *daw* . Other dialectal or obsolete names include *caddesse* , *cawdaw* , *caddy* , *chauk* , *college @-@ bird* , *jackerdaw* , *jacko* , *ka @-@ wattie* , *chimney @-@ sweep bird* ( from their nesting propensities ) , and *sea @-@ crow* ( from the frequency with which they are found on coasts ) . It was also frequently known quasi @-@ nominally as *Jack* .

An archaic collective noun for a group of jackdaws is a " clattering " . Another name for a flock is a "

train " .

### == Taxonomy ==

A study in 2000 found that the genetic distance between jackdaws and the other members of *Corvus* was greater than that within the rest of the genus . This led Pamela Rasmussen to reinstate the genus name *Coloeus* in her *Birds of South Asia* ( 2005 ) , a treatment also used in a 1982 systematic list in German by Hans Edmund Wolters . A study of corvid phylogeny undertaken in 2007 compared DNA sequences in the mitochondrial control region of several corvids . It found that the western jackdaw , and the closely related Daurian jackdaw ( *C. dauuricus* ) of eastern Russia and China , were basal to the core *Corvus* clade . The names *Coloeus monedula* and *Coloeus dauuricus* have since been adopted by the International Ornithological Congress in their official list . The two species of jackdaw have been reported to hybridise in the Altai Mountains , southern Siberia , and Mongolia . Analysis of the mitochondrial DNA of specimens of the two species from their core ranges show them to be genetically distinct .

### == Subspecies ==

There are four recognised subspecies of the western jackdaw . All European subspecies intergrade where their populations meet . *C. m. monedula* intergrades into *C. m. soemmerringii* in a transition zone running from Finland south across the Baltic and eastern Poland to Romania and Croatia .

*C. m. monedula* ( Linnaeus , 1758 ) , the nominate subspecies , is found in eastern Europe . Its range extends across Scandinavia , from southern Finland south to Esbjerg and Haderslev in Denmark , through eastern Germany and Poland , and south across eastern central Europe to the Carpathian Mountains and north @-@ western Romania , Vojvodina in northern Serbia , and Slovenia . It breeds in south @-@ eastern Norway , southern Sweden , and northern and eastern Denmark , with occasional wintering in England and France . It has been recorded as a rare vagrant to Spain . It has a pale nape and sides of the neck , a dark throat , and a light grey partial collar of variable extent .

*C. m. spermologus* ( Vieillot , 1817 ) occurs in western and central Europe from the British Isles , Netherlands and the Rhineland in the north , through western Switzerland into Italy in the south @-@ east , and the Iberian peninsula and Morocco in the south . It winters in the canary Islands and Corsica . The name " *spermologus* " comes from the Greek ??????????? , a picker up of seeds . It is darker in colour than the other subspecies and lacks the whitish border at the base of the grey nape .

*C. m. soemmerringii* ( Fischer , 1811 ) is found in north @-@ eastern Europe and north and central Asia , from the former Soviet Union to Lake Baikal and north @-@ west Mongolia , and south to Turkey , Israel and the eastern Himalayas . Its south @-@ western limits are Serbia and southern Romania . It winters in Iran and northern India ( Kashmir ) . Johann Fischer von Waldheim described this taxon as *Corvus soemmerringii* in 1811 , noting its differences from populations in western Europe . Its species name was given in honour of the German anatomist , Samuel Thomas von Sömmerring . It is distinguished by the nape and the sides of the neck being paler , creating a contrasting black crown and lighter grey part collar .

*C. m. cirtensis* ( Rothschild and Hartert , 1912 ) is found in Morocco and Algeria in north @-@ western Africa and was formerly found in Tunisia . The name " *cirtensis* " refers to the ancient city of Cirta in Numidia . The plumage is duller and more uniformly dark grey than the other subspecies , with the paler nape less distinct .

### == Description ==

Measuring 34 ? 39 centimetres ( 13 ? 15 in ) in length , the western jackdaw is the second smallest member of the genus *Corvus* . Most of the plumage is a shiny black , with a purple ( in subspecies *monedula* and *spermologus* ) or blue ( in subspecies *cirtensis* and *soemmerringii* ) sheen on the

crown , forehead , and secondaries , and a green @-@ blue sheen on the throat , primaries , and tail . The cheeks , nape and neck are light grey to greyish @-@ silver , and the underparts are slate @-@ grey . The legs are black , as is the short stout bill , the length of which is about 75 % of the length of the rest of the head . There are rictal bristles covering around 40 % of the maxilla and 25 % of the lower mandible . The irises of adults are greyish or silvery white while those of juveniles are light blue , becoming brownish before whitening at around one year of age . The sexes look alike , though the head and neck plumage of male birds fades more with age and wear , particularly just before moulting . Western jackdaws undergo a complete moult from June to September in the western parts of their range , and a month later in the east . The purplish sheen of the cap is most prominent just after moulting .

Immature birds have duller and less demarcated plumage . The head is a sooty black , sometimes with a faint greenish sheen and brown feather bases visible ; the back and side of the neck are dark grey and the underparts greyish or sooty black . The tail has narrower feathers and a greenish sheen .

There is very little geographic variation in size . The main differences are the presence or absence of a whitish partial collar at the base of the nape , the variations in the shade of the nape and the tone of the underparts . Populations in central Asia have slightly larger wings and western populations have a slightly heavier bill . Body colour becomes darker further north , in mountain regions and humid climates , and paler elsewhere . However , individual variation , particularly in juveniles and also during the months before moulting , can often be greater than geographic differences .

A skilled flyer , the western jackdaw can manoeuvre tightly as well as tumble and glide . It has characteristic jerky wing beats when flying , though these are not evident when birds are migrating . Wind tunnel experiments show that the preferred gliding speed is between 6 and 11 metres ( 20 and 36 ft ) per second and that the wingspan decreases as the bird flies faster . On the ground , western jackdaws have an upright posture and strut briskly , their short legs giving them a rapid gait . They feed with their heads held down or horizontally .

Within its range , the western jackdaw is unmistakable ; its short bill and grey nape are distinguishing features . From a distance , it can be confused with a rook ( *Corvus frugilegus* ) , or when in flight , with a pigeon or chough . Flying western jackdaws are distinguishable from other corvids by their smaller size , faster and deeper wingbeats and proportionately narrower and less fingered wing tips . They also have shorter , thicker necks , much shorter bills and frequently fly in tighter flocks . They can be distinguished from choughs by their uniformly grey underwings and their black beaks and legs . The western jackdaw is very similar in morphology , behaviour , and calls to the Daurian jackdaw , with which its range overlaps in western Asia . Adults are readily distinguished , since the Daurian has a pied plumage , but immature birds are much more similar , both species having dark plumage and dark eyes . The Daurian tends to be darker , with a less contrasting nape than the Western .

= = = Voice = = =

Western jackdaws are voluble birds . The main call , frequently given in flight , is a metallic and squeaky chyak @-@ chyak or kak @-@ kak . This is a contact or greeting call . A feeding call made by adults to call young , or males when offering food to their mates , has been transcribed as kiaw or kyow . Females in return give a more drawn out version when begging for food from males , written as kyaay , tchaayk or giaaaa . Perched birds often chatter together , and before settling for the night , large roosting flocks make a cackling noise . Western jackdaws also have a hoarse , drawn @-@ out alarm call , arrrrr or kaaaarr , used when warning of predators or when mobbing them . Nestlings begin making a soft cheep at about a week of age . As they grow , their voice becomes louder until their call is a penetrating screech around day 18 . After this , the voice deepens and softens . From day 25 , the young cease calling and become silent if they hear an unfamiliar noise . The European jackdaw can be trained to speak , and whilst it can copy the human voice well , it is usually limited to just a few words or phrases .

## = = Distribution and habitat = =

The western jackdaw is found from north @-@ west Africa through all of Europe , except for the extreme north , and eastwards through central Asia to the eastern Himalayas and Lake Baikal . To the east , it occurs throughout Turkey , the Caucasus , Iran , Iraq , Afghanistan , Pakistan , and north @-@ west India . However , it is regionally extinct in Malta and Tunisia . The range is vast , with an estimated global extent of between 1 million and 10 million square kilometres ( 4 hundred thousand to 4 million square miles ) . It has a large global population , with an estimated 15 @-@ 6 to 45 million individuals in Europe alone . Censuses of bird populations in marginal uplands in Britain show that western jackdaws greatly increased in numbers between the 1970s and 2010 , although this increase may be related to recovery from previous periods when they were regarded as pests . The UK population was estimated at 2 @-@ 5 million individuals in 1998 , up from 780 @-@ 000 in 1970 .

Most populations are resident , but the northern and eastern populations are more migratory , relocating to wintering areas between September and November and returning between February and early May . Their range expands northwards into Russia to Siberia during summer , and retracts in winter . They are vagrants to the Faroe Islands , particularly in the winter and spring , and occasionally to Iceland . Elsewhere , western jackdaws congregate over winter in the Ural Valley in north @-@ western Kazakhstan , the north Caspian , and the Tian Shan region of western China . They are winter visitors to the Quetta Valley in western Pakistan , and are winter vagrants to Lebanon , where they were first recorded in 1962 . In Syria , they are winter vagrants and rare residents with some confirmed breeding taking place . The *soemmerringii* subspecies occurs in south @-@ central Siberia and extreme north @-@ west China and is accidental to Hokkaido , Japan . A small number of western jackdaws reached the north @-@ east of North America in the 1980s and have been found from Atlantic Canada to Pennsylvania . They have also occurred as vagrants in Gibraltar , Mauritania , and Saint Pierre and Miquelon , and one is reported to have been seen in Egypt .

Western jackdaws inhabit wooded steppes , pastures , cultivated land , coastal cliffs , and towns . They thrive when forested areas are cleared and converted to fields and open areas . Habitats with a mix of large trees , buildings , and open ground are preferred ; open fields are left to the rook , and more wooded areas to the Eurasian jay ( *Garrulus glandarius* ) . Along with other corvids such as the rook , common raven ( *Corvus corax* ) , and hooded crow ( *C. cornix* ) , some western jackdaws spend the winter in urban parks ; populations measured in three urban parks in Warsaw show increases from October to December , possibly due to western jackdaws migrating there from areas further north . The same data from Warsaw , collected from 1977 to 2003 , showed that the wintering western jackdaw population had increased four @-@ fold . The cause of the increase is unknown , but a reduction in the number of rooks may have benefited the species locally , or rooks overwintering in Belarus may have caused western jackdaws to relocate to Warsaw .

## = = Behaviour = =

Generally wary of people in the forest or countryside , western jackdaws are much tamer in urban areas . Like magpies , they are known to show interest in shiny objects such as jewellery . John Gay , in his *Beggar 's Opera* , notes that " A covetous fellow , like a jackdaw , steals what he was never made to enjoy , for the sake of hiding it " . In Tobias Smollett 's *The Expedition of Humphry Clinker* , a scathing character assassination runs , " He is ungracious as a hog , greedy as a vulture , and thievish as a jackdaw . "

Highly gregarious , western jackdaws are generally seen in flocks of varying sizes , though males and females pair @-@ bond for life and pairs stay together within flocks . Flocks increase in size in autumn and birds congregate at dusk for communal roosting , with up to several thousand individuals gathering at one site . At Uppsala , Sweden , 40 @-@ 000 birds have been recorded at a single winter roost with mated pairs often settling together for the night . Western jackdaws

frequently congregate with hooded crows or rooks , the latter particularly when migrating or roosting . They have been recorded foraging with the common starling ( *Sturnus vulgaris* ) , Northern lapwing ( *Vanellus vanellus* ) , and common gull ( *Larus canus* ) in northwestern England . Flocks are targets of coordinated hunting by pairs of lanner falcons ( *Falco biarmicus* ) , although larger groups are more able to elude the predators . Western jackdaws sometimes mob and drive off larger birds such as European magpies , common ravens , or Egyptian vultures ( *Neophron percnopterus* ) ; one gives an alarm call which alerts its conspecifics to gather and attack as a group . Occasionally , a sick or injured western jackdaw is mobbed until it is killed .

In his book *King Solomon 's Ring* , Konrad Lorenz described and analysed the complex social interactions in a western jackdaw flock that lived around his house in Altenberg , Austria . He ringed them for identification and caged them in the winter to prevent their annual migration . He found that the birds have a linear hierarchical group structure , with higher @-@ ranked individuals dominating lower @-@ ranked birds , and pair @-@ bonded birds sharing the same rank . Young males establish their individual status before pairing with females . Upon pairing , the female assumes the same social position as her partner . Unmated females are the lowest members in the pecking order , and are the last to have access to food and shelter . Lorenz noted one case in which a male , absent during the dominance struggles and pair bondings , returned to the flock , became the dominant male , and chose one of two unpaired females for a mate . This female immediately assumed a dominant position in the social hierarchy and demonstrated this by pecking others . According to Lorenz , the most significant factor in social behaviour was the immediate and intuitive grasp of the new hierarchy by each of the western jackdaws in the flock .

= = = Social displays = = =

Social hierarchy in western jackdaw flocks is determined by supplanting , fighting , and threat displays ? several of which have been described . In the bill @-@ up posture , the western jackdaw tilts its bill and head upwards and sleeks its plumage . Indicating both appeasement and assertiveness , the posture is used by birds intending to enter feeding flocks . A bill @-@ down posture is another commonly used agonistic behaviour . In this display , a bird lowers its bill and erects its nape and head feathers , and sometimes slightly lifts its wings . Western jackdaws often face off in this posture until one backs down or a fight ensues . In the forward @-@ threat posture , a bird holds its body horizontally and thrusts its head forwards . In intense versions , the bird ruffles its feathers and spreads or raises its tail and wings . This extreme is seen when facing off over nests or females . In the defensive @-@ threat posture , the bird lowers its head and bill , spreads its tail and ruffles its feathers . Supplanting is where one bird moves in and displaces another from a perch @-@ site . The second bird usually retreats without resorting to a fight . Western jackdaws fight by launching themselves at each other feet @-@ first and then wrestling with their feet intertwined and pecking at each other . Other individuals gather and call noisily .

Western jackdaws entreat their partners to preen them by showing their nape and ruffling their head feathers . Birds mainly preen each other 's head and neck . Known as allopreening , this behaviour is almost always done between birds of a mated pair .

= = = Feeding = = =

Foraging takes place mostly on the ground in open areas and to some extent in trees . Landfill sites , bins , streets , and gardens are also visited , more often early in the morning when there are fewer people about . Various feeding methods are employed , such as jumping , pecking , clod @-@ turning and scattering , probing the soil , and occasionally , digging . Flies around cow pats are caught by jumping from the ground or at times by dropping vertically from a few metres onto the cow pat . Earthworms are not usually extracted from the ground by western jackdaws but are eaten from freshly ploughed soil . Jackdaws will ride on the backs of sheep and other mammals , seeking ticks as well as actively gathering wool or hair for nests , and will catch flying ants in flight . Compared with other corvids , the western jackdaw spends more time exploring and turning over objects with

its bill ; it also has a straighter and less downturned bill and increased binocular vision which are advantageous for this foraging strategy .

The western jackdaw tends to feed on small invertebrates up to 18 millimetres ( 0 @.@ 71 in ) in length that are found above ground , including various species of beetle ( particularly cockchafers of the genus *Melolontha* , and weevil larvae and pupae . ) , Diptera , and Lepidoptera species , as well as snails and spiders . Also eaten are small rodents , bats , the eggs and chicks of birds , and carrion such as roadkill . Vegetable items consumed include farm grains ( barley , wheat and oats ) , weed seeds , elderberries , acorns , and various cultivated fruits . Examination of the gizzards of western jackdaws shot in Cyprus in spring and summer revealed a diet of cereals ( predominantly wheat ) and insects ( notably cicadas and beetles ) . The diet averages 84 % plant material except when breeding , when the main food source is insects . A study in southern Spain examining western jackdaw pellets found that they contained significant amounts of siliceous and calcareous grit to aid digestion of vegetable food and supply dietary calcium .

Opportunistic and highly adaptable , the western jackdaw varies its diet markedly depending on available food sources . They have been recorded taking eggs and nestlings from the nests of the skylark ( *Alauda arvensis* ) , Manx shearwater ( *Puffinus puffinus* ) , razorbill ( *Alca torda* ) , common murre ( *Uria aalge* ) , grey heron ( *Ardea cinerea* ) , rock pigeon ( *Columba livia* ) , and Eurasian collared dove ( *Streptopelia decaocto* ) . A field study of a large city dump on the outskirts of León in northwestern Spain showed that western jackdaws forage there in the early morning and at dusk , and engage in some degree of kleptoparasitism . The saker falcon ( *Falco cherrug* ) has been reported stealing food from western jackdaws on powerlines in Vojvodina in Serbia .

Western jackdaws practice active food sharing ? where the initiative for the transfer lies with the donor ? with a number of individuals , regardless of sex or kinship . They also share more of a preferred food than a less preferred food . The active giving of food by most birds is found mainly in the context of parental care and courtship . Western jackdaws show much higher levels of active giving than has been documented for other species , including chimpanzees . The function of this behaviour is not fully understood , though it has been found to be detached from nutrition and compatible with hypotheses of mutualism , reciprocity and harassment avoidance . It has also been proposed that food sharing may be motivated by prestige enhancement .

= = = Breeding = = =

Western jackdaws become sexually mature in their second year . Genetic analysis of pairs and offspring shows no evidence of extra @.@ pair copulation and there is little evidence for couple separation even after multiple instances of reproductive failure . Some pairs do separate in the first few months , but almost all pairings of over six months ' duration are lifelong , ending only when a partner dies . Widowed or separated birds fare badly , often being ousted from nests or territories and unable to rear broods alone .

Western jackdaws usually breed in colonies with pairs collaborating to find a nest site , which they then defend from other pairs and predators during most of the year . They nest in cavities in trees or cliffs , in ruined or occupied buildings and in chimneys , the common feature being a sheltered site for the nest . The availability of suitable sites influences their presence in a locale . They may also use church steeples for nesting , a fact reported in verse by 18th century English poet William Cowper :

A great frequenter of the church , Where , bishoplike , he finds a perch , And dormitory too .

A mated pair usually constructs a nest by improving a crevice by dropping sticks into it ; it is then built on top of the platform formed . This behaviour has led to the blocking of chimneys and even resulted in nests crashing down into fireplaces , sometimes with birds still on them . Nest platforms can attain a great size . John Mason Neale notes that a " Clerk was allowed by the Churchwarden to have for his own use all that the caddows had brought into the Tower : and he took home , at one time , two cart @.@ loads of good firewood , besides a great quantity of rubbish which he threw away . " In his *The Natural History of Selborne* , Gilbert White notes that western jackdaws used to nest in crevices beneath the lintels of Stonehenge , and describes an example of the bird using a

rabbit burrow for nesting . The species has been recorded outcompeting the tawny owl ( *Strix aluco* ) for nest sites in the Netherlands . They can take over old nest sites of the black woodpecker ( *Dryocopus martius* ) and stock dove ( *Columba oenas* ) . Breeding colonies may also edge out those of the red @-@ billed chough , but in turn be ousted by larger corvids such as the carrion crow , rook or magpie .

Nests are lined with hair , wool , dead grass and many other materials . The eggs are a lighter colour than those of other corvids , being smooth , a glossy pale blue or blue @-@ green with darker speckles ranging from dark brown to olive or grey @-@ violet . Egg size and weight varies slightly between subspecies ; those of subspecies *monedula* average 35 @. @ 0 by 24 @. @ 7 millimetres ( 1 @. @ 38 in x 0 @. @ 97 in ) and 11 @. @ 1 g ( 0 @. @ 39 oz ) in weight , those of subspecies *soemmerringii* 34 @. @ 8 by 25 @. @ 0 millimetres ( 1 @. @ 37 in x 0 @. @ 98 in ) in size and 11 @. @ 3 g ( 0 @. @ 40 oz ) in weight , and those of subspecies *spermologus* 35 @. @ 0 by 25 @. @ 2 millimetres ( 1 @. @ 38 in x 0 @. @ 99 in ) in size and 11 @. @ 5 g ( 0 @. @ 41 oz ) in weight . Clutches usually contain 4 or 5 eggs , although a Slovakian study found clutch sizes ranging from 2 to 9 eggs . The eggs are incubated by the female for 17 ? 18 days until hatching as naked altricial chicks , which are completely dependent on the adults for food . They fledge after 28 ? 35 days , and the parents continue to feed them for another four weeks or so .

Western jackdaws hatch asynchronously and incubation begins before clutch completion , which often leads to the death of the last @-@ hatched young . If the supply of food is low , parental investment in the brood is kept to a minimum as little energy is wasted on feeding a chick that is unlikely to survive . Replacement clutches are very rarely laid in the event of clutch failure .

The great spotted cuckoo ( *Clamator glandarius* ) has been recorded as a brood parasite of the western jackdaw , depositing its eggs in their nests in Spain and Israel . Nest robbers include the common raven in Spain , tawny owl , and least weasel ( *Mustela nivalis* ) in England , and brown rat ( *Rattus norvegicus* ) in Finland . The European pine marten ( *Martes martes* ) raids isolated nests in Sweden but is less successful when nests are part of a colony .

= = Parasites and diseases = =

Western jackdaws have learned to peck open the foil caps of milk bottles left on the doorsteps after delivery by the milkman . The bacterium *Campylobacter jejuni* has been isolated from their beaks and cloacae so milk can become contaminated as they drink . This activity was linked to cases of *Campylobacter gastroenteritis* in Gateshead in northeast England and led the Department of Health to suggest that milk from bottles which had been pecked open should be discarded . It was recommended that steps be taken to prevent birds attacking bottles in future .

An outbreak of a gastrointestinal illness in Spain which was causing mortalities in humans has been linked to western jackdaws . During a post @-@ mortem on an affected bird , a polyomavirus was isolated from the spleen . The illness appeared to be a co @-@ infection of this with *Salmonella* and the virus has been provisionally named the crow polyomavirus ( CPyV ) . Segmented filamentous bacteria have been isolated from the small intestine of a western jackdaw , although their pathogenicity or role is unknown .

= = Pest control = =

The western jackdaw has been hunted as vermin , though not as heavily culled as other species of corvid . After a series of poor harvests in the early 1500s , Henry VIII introduced a Vermin Act in 1532 " ordeyned to dystroye Choughes ( i.e. jackdaws ) , Crowes and Rokes " to protect grain crops from their predations . Western jackdaws were notorious as they also favoured fruit , especially cherries . This act was taken up in a piecemeal fashion , but Elizabeth I passed the Act for the Preservation of Grayne in 1566 that was taken up with more vigour . The species was hunted for its threat to grain crops and for propensity for nesting in belfries until the mid @-@ 20th century . Particularly large numbers were culled in the county of Norfolk . Western jackdaws were also culled on game estates as they raid nests of other birds for eggs . In a 2003 dissertation on public opinion

of corvids , Antonia Hereth notes that the German naturalist Alfred Brehm considered the western jackdaw to be a lovable bird , and did not describe any negative impacts of this species on agriculture .

The western jackdaw is one of a very small number of birds that it is legal to use as a decoy or to trap in a cage in the United Kingdom . The other pest species that can be controlled by trapping are the crow , jay , magpie and rook . An authorised person must comply with the requirements of the Wildlife and Countryside Act 1981 and does not need to show that the birds were a nuisance before trapping them . As of 2003 the western jackdaw was listed as a potential species for targeted hunting in the European Union Birds Directive , and hunting has been encouraged by German hunting associations . Permission to shoot western jackdaws in spring and summer exists in Cyprus as they are thought ( incorrectly ) to prey on gamebirds .

= = Cultural depictions and folklore = =

An ancient Greek and Roman adage runs " The swans will sing when the jackdaws are silent " , meaning that educated or wise people will speak only after the foolish have become quiet . In Ancient Greek folklore , a jackdaw can be caught with a dish of oil . A narcissistic creature , it falls in while looking at its own reflection . The mythical Princess Arne Sithonis was bribed with gold by King Minos of Crete , and was punished by the gods for her greed by being transformed into an equally avaricious jackdaw , who still seeks shiny things . The Roman poet Ovid described jackdaws as harbingers of rain in his poetic work Amores . Pliny notes how the Thessalians , Illyrians , and Lemnians cherished jackdaws for destroying grasshoppers ' eggs . The Veneti are fabled to have bribed the jackdaws to spare their crops .

In some cultures , a jackdaw on the roof is said to predict a new arrival ; alternatively , a jackdaw settling on the roof of a house or flying down a chimney is an omen of death , and coming across one is considered a bad omen . A jackdaw standing on the vanes of a cathedral tower is said to foretell rain . The 12th century historian William of Malmesbury records the story of a woman who , upon hearing a jackdaw chattering " more loudly than usual , " grew pale and became fearful of suffering a " dreadful calamity " , and that " while yet speaking , the messenger of her misfortunes arrived " . Czech superstition formerly held that if jackdaws are seen quarreling , war will follow , and that jackdaws will not build nests at Sázava after being banished by Saint Procopius .

The jackdaw was considered sacred in Welsh folklore as it nested in church steeples ? it was shunned by the Devil because of its choice of residence . Nineteenth century belief in the Fens held that seeing a jackdaw on the way to a wedding was a good omen for a bride .

The jackdaw is featured on the Ukrainian town of Halych 's ancient coat of arms , the town 's name allegedly being derived from the East Slavic word for the bird . In The Book of Laughter and Forgetting ( 1979 ) , Milan Kundera notes that Franz Kafka 's father Hermann had a sign in front of his shop with a jackdaw painted next to his name , since " kavka " means jackdaw in Czech .