



Storks Route

Alcalá de Henares



ayto-alcaladehenares.es



Ciudades
Patrimonio
de la Humanidad
ESPAÑA/UNESCO



ALCALÁ DE HENARES
AYUNTAMIENTO

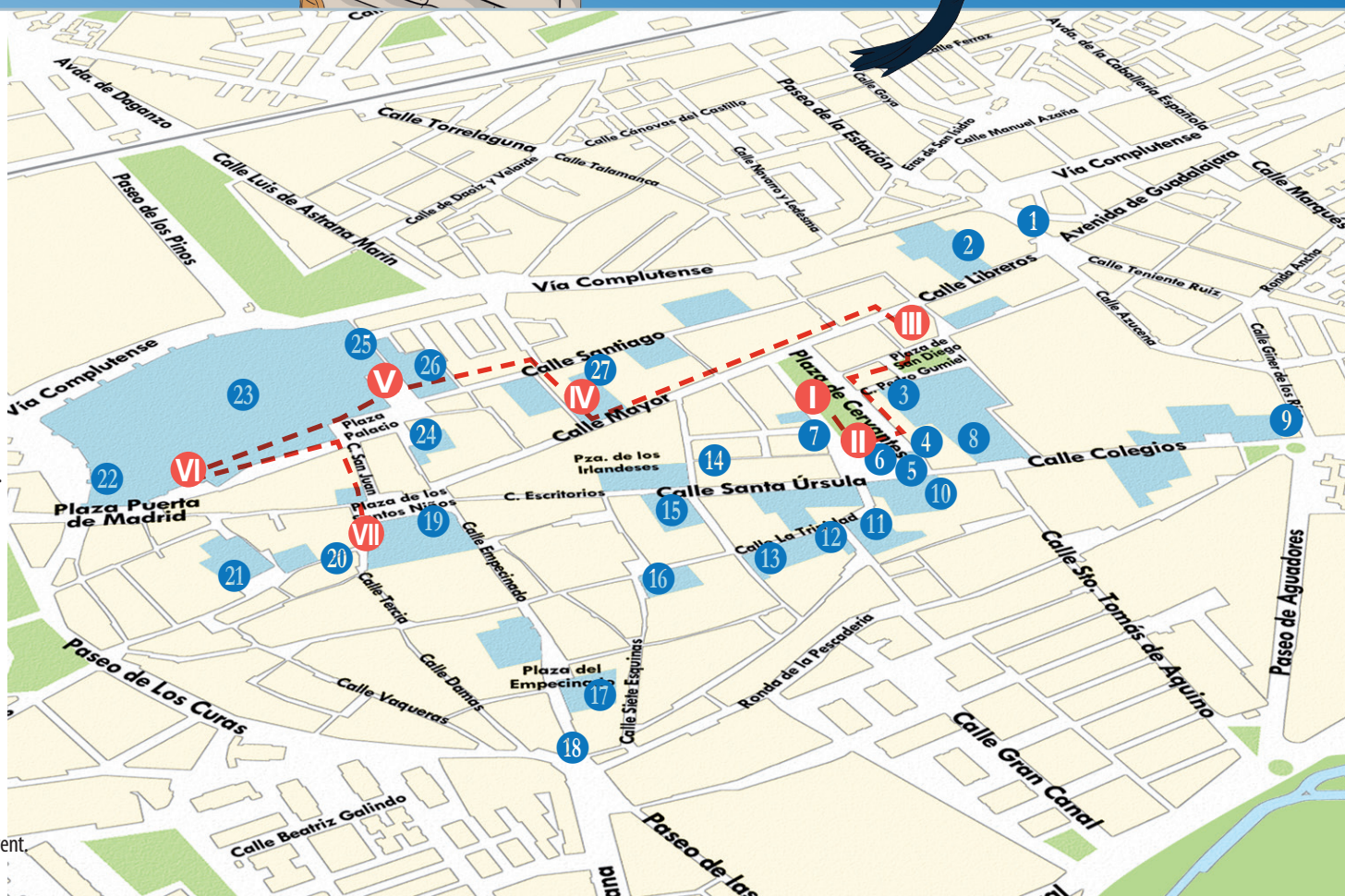
STOPS

- I Cervantes Square
- II Interpretation Centre 'Universos de Cervantes'
- III San Diego Square
- IV Calle Mayor (Main street).
- V Palace Square
- VI Archbishop's Palace
- VII Santos Niños Square



BUILDINGS WITH NESTS

- 1 Faculty of Law. Former Jesuit College.
- 2 Santa María Church.
- 3 San Ildefonso Chapel.
- 4 CIFF. Former Santo Tomás School.
- 5 Interpretation Centre 'Universos de Cervantes'. Oidor Chapel.
- 6 Santa María Tower.
- 7 City Council. Former San Carlos Borromeo College.
- 8 Bar Association. Former Mother of God College.
- 9 Convent of Discalced Carmelites of Corpus Christi.
- 10 Malaga College. Faculty of Philosophy and Letters.
- 11 College of Discalced Trinitarians.
- 12 13 Caracciolo College. Faculty of Philology.
- 14 Faculty of Architecture. Former Convent of Calced Carmelites.
- 15 Convent Our Lady of Consolation.
- 16 Convent of Santa Clara.
- 17 18 Former Military Quarters for Breeding Stud. Old Mercedarios College.
- 19 Magisterial Cathedral.
- 20 Santa Lucía Hermitage.
- 21 Faculty of Economy. Former Mínimos de Santa Ana College.
- 22 Medieval Wall.
- 23 Ruins of the Archbishop's Palace.
- 24 Oratory of Saint Philip Neri.
- 25 San Bernardo Monastery.
- 26 Archaeological Regional Museum. Former Mother of God Convent.
- 27 'La Cúpula' restaurant. Former Convent of Capuchinos.



STORKS ROUTE

SUMMARY

A route throughout the historical centre of the city of Alcalá which enables us to observe nests and storks and to find out more about this bird, bound to our city.

Thanks to this route we can acquire knowledge about historical and artistic heritage of different buildings and we can also get to know the life, customs and adaptation of the storks to the urban environment. On the other hand, the route will let you appreciate the presence of the stork as an identity trademark of this World Heritage City.

For an optimal observation we recommend binoculars, route guide and map of the nests. For further information please visit www.ayto-alcaladehenares.es. For opening times of monuments and museums type www.turismoalcala.es.

APPROXIMATE DURATION

2 hours

LOCATION

Historical Centre of Alcalá de Henares

STOPS

- I Cervantes Square.**
Storks' types and habitat.
- II Interpretation Centre 'Universos de Cervantes'. Oidor Chapel.**
General information, distribution, feeding.
- III San Diego Square.**
Flight and migration.
- IV Mayor Street.**
Nesting and nest defence.
- V Bernardas Square.**
Female estrous cycle and mating.
- VI Archbishop's Palace.**
Eggs' incubation and baby bird feeding.
- VII Santos Niños Square.**
Baby bird first flight and causes of mortality.



I Stop. Cervantes Square.

CERVANTES' STATUE AND PLAYHOUSE.

What to see?: Cervantes' Statue, Music Stand, Interpretation Centre 'Universos de Cervantes', Tower of the former Santa María Parish., City Council (former San Carlos Borromeo College), Malaga College, Playhouse (Old 17th Century Theater).

HISTORY

2ND CENTURY B.C. First urban settlement on top of El Viso hill.

Around the **1ST CENTURY A.D.** population moved to the Henares river bank in the area known nowadays as 'El Juncal' where the Roman City underwent great development until the Late Antiquity.

10TH CENTURY A.D. Moslem forces build up the fortress Al-Q'alat Abd al Salam, a castle upon the river Henares, from which words derive the present name of Alcalá de Henares.

After the conquest of the arab castle in **1118** by the Christians, the medieval town grows around Saint Just and Pastor church.

From **12TH TO 15TH CENTURY** the medieval town was divided into three quarters: Christian, Muslim and Jewish with two synagogues and one mosque.

15TH CENTURY. Cardinal Cisneros founds the University of Alcalá, engine of a cultural and artistic blast through the **16TH AND 17TH CENTURIES.**

18TH CENTURY. Slow decline of the city which reaches its highest point in 1836 with the moving of the University to Madrid.

Alcalá de Henares is declared by UNESCO World Heritage City in **1.998.**

Cervantes Square was the Market Square where a weekly market, bull-fighting and the most important festivals took place. The famous Fair of Alcalá took also place here.

Corral the Comedias (17th Century Playhouse). It is the oldest of its kind

in Spain. It was build in 1601 and it adapted to the different theatre periods. At present it is possible to observe different scenographic typologies and elements of the theatre history in Spain since the 17th century.

STORKS

There are 19 species of storks. In the Iberian Peninsula: white and black storks. White stork has been declared 'Vulnerable Species' in the Spanish Catalogue of Threatened Species.

In natural conditions they nest in trees, developing their activity in open fields, crops, and flood zones. They have quite adapted to human life. Humans provide them with locations for nesting (such as buildings, chimneys, etc.) and with food (crops, agriculture ponds, paddocks and landfill sites).

Since a long time ago storks are the brand image of Alcalá, many buildings of the historical centre have one nest or more. In the 70's only 10 couple were available. In the 80's 10 to 20 couples. In the 90's the number grew up to 80, increase which was favoured by the landfill site, which was an easy way to obtain food and the cause for some couples not to migrate anymore. In 2013, 111 breeding couples were registered.





II Stop. Interpretation Centre 'Universos de Cervantes'.

What to see ?: Interpretation Centre 'Universos de Cervantes'. Santa María Tower .

HISTORY

Located in one of the most symbolic places of the city related to the famous writer Miguel de Cervantes: the chapels of Antezana and Oidor. They are part of the church where the author of Don Quixote was baptized, the former Parish of Santa María la Mayor. In its interior we can contemplate, among other pieces of great value, the font where Miguel de Cervantes was baptized on October 9, 1547 and a facsimile of its baptism record. Besides it has a significant programme for temporary exhibitions all year round.

STORKS

The white stork (*Ciconia ciconia*) is a long-legged bird. Peak and legs are red in adults and black in the baby birds, also called 'cigoñino'.

Size: From the beak tip to the end of the legs between 1 and 1.15 metres and wingspan 2-2.10 m

Weight: between 3 and 4.5 kg for male specimens whereas females between 2.7 to 4 kg. There is no sexual dimorphism.

Lifespan: Storks can live 20 years, but there are very rare exceptions which reach the age of 33.

Egg lay: 3-5 eggs. Eggs measure between 5 and 7 cm.

White stork is widespread throughout the North of Africa, Europe and Asia. In the Iberian peninsula they are to be found in the Western half: Extremadura, Western Castile and Leon, Castile-la Mancha, Madrid, part of Andalusia and centre and south of Portugal. In the Autonomous Community of Madrid they inhabit the whole territory except for the Southeast.

Their expansion to the east is limited by the rivers Jarama and Henares.

White Stork is a wading bird with long beak, neck and legs which enable them to feed in the shallow banks of ponds, rivers and dams where they capture amphibians fishes and water invertebrates. In the crops and meadows they are fed by small reptiles, small mammals (shrews and voles), insects (grasshoppers, beetles) and earthworms. During the last years they have adapted to search for food in the landfills where they have plenty of food and it is easy to obtain. Their hunting technique lies in walking slowly looking attentively at the floor. They pinpoint their preys and capture them throwing their beak as if it were a harpoon with great accuracy and speed.

The undigested food rests that are regurgitated in ball shapes are called 'egagrópilas' (pellet) and they may contain bones, feathers, fish bones, etc.





III Stop. San Diego Square.

UNIVERSITY

What to see?: University College San Ildefonso.

HISTORY

The Major University College San Ildefonso and Rectorate of the University of Alcalá is the core of the University infrastructure designed by Cardinal Cisneros from 1499. Behind the Renaissance facade designed by architect Gil de Hontañón some interesting elements stand out in the building: three magnificent courtyards (Santo Tomás de Villanueva, Filósofos and Trilingüe), the old University Auditorium from the 16th century (Paraninfo, where every year the King of Spain presents the Cervantes Literature Prize), and the University San Ildefonso Chapel which houses the tomb of Cardinal Cisneros.

STORKS

Storks are soaring birds with a big wing surface. They fly thanks to their hollow light bones, a strong muscle structure, a resistant respiratory system and feathers.

Migration is the journey to areas where climate or food are more favourable than certain bird species do in order to get food or to breed. The trip is carried out in different stages following the same routes every year.

The Henares river is an important way for birds migration as it marks a straight path which crosses the Peninsula from its central point. The Henares connects to Jalón river coming from the Ebro valley and from there to the Pyrenees.

The stork is unique because of the dates they migrate. They leave very soon (July/August) and comes back very soon as well (December/January). It does not migrate escaping the cold, but because of food scarcity. They fly to Africa where there is a large number of insects throughout the year.

Iberian storks gather in groups and travel together to the Strait (Tarifa),

between the two continents, chosen because no thermal currents are created over the sea surface and they cannot soar but flap their wings continuously along the 14 km itinerary.

Originally they all did the whole migratory itinerary and they arrived to Western Africa. Nowadays this itinerary becomes shorter and shorter (Northern Africa) and they come back sooner, around November. During the last few years some storks have stayed in the Iberian Peninsula because of landfills and they return to Alcalá in October. Every migration involves mortality risks. If food is easy to be found and accessible all year round, migration is not necessary and survival expectations rise.

If a stork, which usually migrates, joins a group of non-migrant storks, it will learn it and will stop migrating, being therefore a learning behaviour. If this trend continues, many storks will stop migrating.

Young storks start their migration to Africa before adults do (in July) and return later (around March).





IV Stop. Mayor Street.

MIGUEL DE CERVANTES BIRTHPLACE MUSEUM.

What to see?: Miguel de Cervantes Birthplace Museum. Calle Mayor.

HISTORY

Alcalá's Calle Mayor (Main Street), with a length of 390 m. is one of the longest portico streets in Europe. Between the **XII-XV CENTURIES** Jewish, Muslim and Christian people lived here together.

Muslim Quarter: the main street of the quarter was Calle Santiago. Most of the moors in Alcalá were devoted to masonry, carpentry, land labour, blacksmithing, locksmithing and pottery.

Christian Quarter: it grew around the Cathedral of St Justus and St Pastor.

Jewish Quarter: the Jewish Aljama quarter was once located between Santiago and Escritorios streets. Its main street was Calle Mayor. The porticoes were designed for commercial purposes.

The first pillars at Calle Mayor were made out of wood. Gradually, they were replaced with the modern stone columns. Some of them still preserve traces of the original polichromy.

Miguel de Cervantes Birthplace Museum is located at Calle Mayor. This house belonged to Cervantes' family during the 16th century. Here, the writer was born in 1547. The museum recreates the atmosphere of a typical Spanish house of that period. It also displays a huge bibliographic collection of Cervantes' works.

STORKS

The construction and preparation of the nests is the first step before breeding. They use branches, sand, and straw to build them. Generally, storks use the same nests year after year. This loyalty to their nests doesn't imply fidelity with their partners.

The young stork pairs have to construct their own nests because usually all of them are occupied at the beginning of March. First of all, they choose the location. Then, they stay there for some days, defending the place, chirping (crotoreando) and mating. After that, they start carrying sticks to build the nest.

The males occupy the nest first. They are very open to the first female that comes along to become pair bonds with. According with their reproductive instinct they start defending their nests, repairing them, chirping, greeting their partners and mating patterns begin to show themselves. The status of the nests depends on their characteristics: the height of the location, the size... The weight of the nests varies between 30 and 600 kg. The nests at the University are usually the first to be occupied.

The pair builds the nest (if it is necessary) and repairs it during the whole season. The adding of new sticks follows a mating pattern: the male takes one stick to the nest, and then both birds of the pair hold it together from each end, moving it up and down until they finally place it in the nest. When clutching season arrives, they cover the bottom of the nest with straw and keep it clean, defecating outside the edge.

If the nest falls down or disappears, the stork pair will go to another place. They prefer recycling old nests instead of constructing a new one. Nests don't have "official owners". They have to be defended according to dissuasive patterns (crouching their heads, spreading their wings and flapping them while lifting their tail and emitting a whistle). They can end up fighting through flapping their wings and pecking each other.





V Stop. Bernardas Square.

MONASTERY OF SAN BERNARDO

What to see? Monastery of San Bernardo, Old Mother of God Convent– Archaeological Museum.

HISTORY

The Monastery of San Bernardo stands out at this square. It was designed by Juan Gómez de Mora, and it is considered one of the best Spanish baroque buildings. It's an Italian style temple, with an elliptical floor and an oval dome. Inside, at the main chapel there is an interesting four sided baldachin, used for saying four masses at the same time, and, behind it, a grill that marks the beginning of the closure area. To build this convent, a part of the old *Almanxara*, or Muslim Quarter, had to be demolished. Next to this building, another baroque building: the former Mother of God Convent, nowadays the Archaeological Museum of the Community of Madrid, with its excellent collection.

STORKS

When the nest is occupied by a pair of storks, the mating season starts. It involves certain patterns expecting to inhibit aggressive behaviors, as well as build the necessary ties to breed the new chicks. At the same time, the reproductive process to fertilise the eggs starts.

The most common and observable mating patterns are the clattering sounds or *crotoreos*. This is a kind of greeting emitted by the storks from their nests when their mate arrives. They place themselves in parallel and stretch the neck down. Then, they begin to open and close the peak fast and rhythmically doing a hollow sound. After that, they put back the neck and return to initial position, clattering all the time. *Crocoteo* or clattering is a very sticky sound: once a stork begins to do it, the others storks around will imitate it.

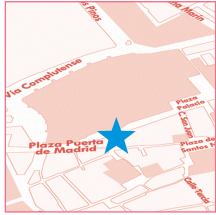
The dance is a way to show the possession of the nest. The stork turns and jumps around the nest for a full lap with the wings opened.

If the stork feels in danger, it will hit its peak sharply and vigorously until the menace disappears, returning afterwards to the usual position.

If the ties between the pair grow strong, mating patterns intensify and the reproductive organs mature at the same time. During the copulation, the male walks around the female in circles and tries to climb to her back. Only female storks that are in their responsive period let the male mate with her and fertilise the eggs.

The mating season is around February. Sexual maturity is reached at 2-3 years for males, and at 5 years for females.





VI Stop. Palacio Arzobispal (Archbishop's Palace).

HUERTA DEL OBISPO (BISHOP'S GARDEN).

What to see?: Archbishop's Palace, Antiquarium, Interpretation Centre 'Burgo de Santuiste'.

HISTORY

It was the residence of the Archbishops of Toledo in Alcalá de Henares. We know about its existence from the **13TH CENTURY**, but the building was extended, renovated and improved until **19TH CENTURY**. Its architecture is a mixture of renaissance, mudéjar (arab) and baroque styles. The most relevant intervention for the aspect of the palace came during the **14TH CENTURY**, from the hands of Alonso de Covarrubias, the official architect of emperor Charles V.

Many monarchs of the Kingdom of Castille lived in the palace. Also, important councils and meetings were held inside. Two foreign monarchs were born inside the Palace: Catherine of Aragon, queen of England, and Ferdinand of Habsburg, emperor of Germany. Besides, the first meeting between Christopher Columbus and the Catholic Monarchs was held here.

In 1939 the Archbishop's Palace suffered a fire that destroyed most of the building.

Antiquarium. Tower XIV of the walled enclosure is the access to the *Antiquarium*, an open air museum that shows us the remains of the old Palace, recreating the renaissance courtyards of Ave María, Fonseca and the Staircase of Covarrubias. It is also possible to climb to the medieval wall, visiting the interior of the towers. In front of the entrance of the *Antiquarium*, we find an small museum on the medieval history of Alcalá, the Interpretation Centre 'Burgo de Santiuste'.

STORKS

Storks lay between 3 and 5 white eggs, weighing about 100 grams each.

They lay the eggs one by one, every two days, and the incubation starts with the second egg. Stork chicks usually are born every two days, and, if their parents don't bring enough food, only the oldest survive, being the strongest struggling for food.

The incubation lasts 33-34 days (from February to May). Both sexes incubate the eggs, the female at night. The nest is never left alone. The adult storks turn the eggs around regularly to distribute the warmth equally. Eggs also need oxygen, and release carbon dioxide through the microscopic pores in the shell.

The birth of the chicks and the first days of their life are crucial, because they are exposed to climatologic conditions like rain and cold in that part of the year. They have a lot of appetite and they grow up fast; when the chick is born it weighs around 67 grams, but 50 days later, they are 60 times bigger (around 4,300 grams). That means chicks have a similar size to adult storks, but we are capable of distinguishing them because chicks have black beaks and legs.

Chicks are fed by their progenitor by turns. Adult storks regurgitate the food. Parents alternate in the nest giving protection, warmth and shadow to the chicks. When they reach a certain size, both progenitors will go out looking for food and water.

Many chicks (1-2 per pair) die in their nests because of the low temperatures, the rain, food shortages or even strangulation of their legs with ropes.





VII Stop. Santos Niños Square.

CATHEDRAL OF ST JUSTUS AND ST PASTOR.

What to see?: Cathedral of St Justus and St Pastor.

HISTORY

The Cathedral was built in late Gothic style over the tombs of St Justus and St Pastor, the Holy Children (los Santos Niños). According to the legend, Justus and Pastor were killed by the romans at the beginning of the **4TH CENTURY**. In 1497 Cardinal Cisneros ordered the current church to be built over the remains of previous buildings. The renaissance bell tower, designed by Rodrigo Gil de Hontañón, stands out over the complex, with its spiral staircase. The church was given the title of Collegiate during the Middle Ages, and it became the heart and soul of the town. The title of Magisterial was granted by Cisneros. That meant that the Church Chapter had to be formed by Theologic Doctors of the University.

At the main façade we can find the coats of arms of the Archdiocese of Toledo and the ones of Cardinal Cisneros.

STORKS

When the chicks are 70 days old, they do their first flight. Only one third of them can fly successfully. They have been training their wings during the previous days, climbing the nest sides. Most stork chicks fly for the first time around June.

The chicks that are able to fly learn the way to the dump, the main source of food. Initially they come back to the nest to be fed by their parents, but later they will learn to eat for themselves. Chicks can walk or fly to other nests. Sometimes they are welcome, and sometimes they are not. There are even cases of nests with seven chicks where initially there were only four of them. But we can find also the opposite case: the adults of the new nest rejecting the chick, pecking and even injuring it.

Few days later, many chicks cease to visit their nests, and together with

other chicks, they usually sleep together over the roofs of the city. Young storks don't migrate with their parents, and usually leave Alcalá at mid-July with other chicks and young adults that already know the way.

The parents will stay for another month in the nest, taking care of it until the second half of August. During their first two years, young storks often migrate to sub-Saharan Africa. Afterwards, many of them will shorten their migrations or will not migrate at all.





FURTHER INFORMATION

Concejalía de Seguridad Ciudadana, Tráfico y Movilidad,
Medio Ambiente y Aguas
Vía Complutense, 130. Tel.: 91 877 12 50
mambiente-educacion@ayto-alcaladehenares.es

Depósito Legal: M-1430-2015



Ciudades
Patrimonio
de la Humanidad
ESPAÑA UNESCO



ALCALÁ DE HENARES
AYUNTAMIENTO



ayto-alcaladehenares.es