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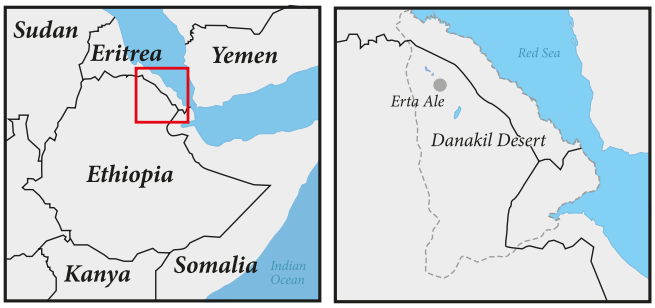
Geotouristic attractions of the Danakil Depression

Katarzyna Cieśluk[1], Mirosław T. Karasiewicz[1*], Zdzisław Preisner[2]
[1] Nicolaus Copernicus University, Faculty of Earth Sciences,
ul. Lwowska 1, 87–100 Toruń; [*]e-mail: mtkar@umk.pl
[2]Toruń School of Banking, ul. Młodzieżowa 31a, 87–100 Toruń



Abstract: *Geotourists and unconventional tourists will be definitely interested in the Danakil Valley. It is rarely visited place but absolutely extraordinary in many ways. It is in an area of divergence of lithosphere plates and, therefore connected to that, seismic and volcanic activity can be observed. Stunning terrain forms, geological structures, colours and diversity seem to be unreal. This desert is very inhospitable due to poisonous exhalations, omnipresent salt, an extremely hot climate, water deficiency and the fact that fauna and flora don't exist here. Despite all of these inconveniences, the Danakil Valley is inhabited by the Afars, a population thriving mainly on primitive salt production. Their rare culture is worth attention too. Not so long ago they were hostile and even now natives can be unpredictable and dangerous. Additionally, visitors should remember other difficulties: legal, organisational, financial and, above all, natural and climatic ones.*

Key words: *Ethiopia, Danakil, Danakil Desert, Afar, Afrera Lake, Erta Ale, volcanos, salt*

Introduction

The Danakil Valley occurs in The Afar Triangle, within The Great Rift Valley, on north-east Ethiopian, south-east Eritrean and west Djiboutian territories. It is an enormous unsettled area with barren soil. From the North to the South it is about 570 km long, and its width varies from 80 to 400 km (covering an area~200000 km^2 – Beyene, Abdelsalam, 2005). Most of it lies below sea level. It also has the deepest depression of the African continent, the shoreline of lake Asal reaching 155 m b.s.l. (Waltham, 2010, but Morell, 2012–156 m b.s.l.). Its geological, climatic, cultural and landscape features are unique on a global scale. Hot sulphur springs, multicolour salt and mineral crusts, rifts, faults, black lavas, vaporous geysers and active volcanos create one of the most weird and beautiful landscapes on Earth.

Fig. 1. Location of Danakil Depression: A – Location in Africa; B – Detailed location with reference to the plates of the lithosphere and the national borders (after Morell, 2012, simplified); C – Schematic diagram of triple junction, showing the two active arms that form an ocean basin and the failed arm that forms an aulacogen. The East African Rift System is the failed arm (after Ritchie, Gates, 2001, simplified)

Nowhere else can so many unusual phenomena and geological processes be observed: plate divergence, tectonic rifts, faults, earthquakes, volcano eruptions, lava outflows, a lake of hot lava in a crater, hot springs, steam and gas exhalations, evaporation, deflation, corrasion, saline lakes, colourful salt crust and sand dunes. It is the hottest place on Earth, where during the dry season (in July and August) thermometers can read 50 ˚C (Harris, 2008). Average temperature for the whole year is 34 ˚C (Briggs, 2010). Considering how inhospitable Danakil is for its inhabitants, the place seems to be even more interesting and worth visiting (Fig. 1).

Fig. 2. Afar window – view from the Ethiopian highlands to the Afar rift (Gemasa Gedel near Debre Sina), photo M.T. Karasiewicz

Tectonics and geological structure

The Danakil Depression is a tectonic depression, visibly lowered in comparison to neighbouring areas (Fig. 2). Most of its bottom lies below sea level.

The Danakil Depression lies in the system of The East African Rifts, associated with the world-wide mid ocean rift systems. It is a unique sequence of basins, about one hundred kilometers long, tens of kilometers wide, which can be filled with sediments and/or volcanic rocks. The system is several thousand kilometers long, a series of rift valleys, separated by shoals and bordered by uplifted shoulders (Żaba, 2005). There are two main rift valleys (the eastern and the western) and the smaller southeastern branch – Mozambique Channel (Chorowicz, 2005; Omenda, 2007).

During global plate reorganisations, the East African rift system moved northward from the Mesozoic Anza rift system into the Afar depression and cut across rift structures of the Red Sea and Gulf of Aden. The Red Sea, Gulf of Aden and Ethiopian rifts intersect in a complex zone within the central Afar depression, creating the typical rift-rift-rift triple junction zone (Wolfenden *et al*., 2004; Waltham, 2005). Originally in a different position, the Afar triple junction migrated north-eastward, because of along-axis propagation of rifting in each of the three arms (Fig. 1A, B, C). That caused a change in the orientation of the Red Sea rift. The present one is from the north-west to the south-east. Strong cross-rift dislocations also cause the margins of the main Ethiopian rift to continue southwards, which gives its north-east to south-west orientation (Wolfenden *et al*., 2004; Schlüter, 2006; Hammond *et al*., 2011). Incipient divergence was along the line of the Red Sea until the breaking away of the Danakil Microplate which then started to move independently of the Nubian Plate since about 11 Ma. The Afar Triple Junction accommodates the divergent motions between the Arabian, Nubian and Somalian plates (Beyene, Abdelsalam, 2005; Waltham, 2005).The volcanic and tectonic activity in the rift started about 30 million years ago. The eastern branch is characterised by stronger geothermal activity. The Afar part, which lies above the Afar Hot Spot (McClusky *et al*., 2010), is the most active segment of the entire rift system. The potential energy production of Eastern Africa is 2500 to 6500 MW using today's technologies, which would mean from 1/4 to 3/4 of current worldwide energy from geothermal power (Omenda, 2007). The Afar Hot Spot also results in voluminous volcanic activity, high elevation and, because of interaction with tectonic extension, spatially distributed and temporally evolving deformation around the Triple Junction, even though the Arabia-Nubia-Somalia relative plate motions have remained quite constant since 11 Ma (McClusky *et al*., 2010). The East African rift system was already described by Żaba (2005) in the journal Geotourism.

As mentioned before, the Afar Triangle is characterised by strong seismic activity. In this region a quarter of all active African volcanoes can be found as well as frequent and strong earthquakes. One of the strongest earthquakes took place in 2005 (Beyene, Abdelsalam, 2005; Bojanowski, 2006; Morell, 2012). The Afar Triangle lies among The Red Sea and Ethiopian highlands: Abyssinia to the West and Somali to the East. It is a very special place, one of a very few on our planet, where an underground oceanic ridge can be found on the surface. This jagged volcanic seam of magma soaks through and creates a new sea bottom. Here, geologists have an opportunity to study geological processes which usually occur underneath the ocean bottom. Three tectonic plates contact here: Nubian, Arabic and Somali (Fig 1, 3, 4). The central meeting place for these three pieces of the Earth's crust is around Lake Abbe. They constantly move away from one another at a speed of about 12–13 mm per year (Waltham, 2005, 2010; Morell, 2012) and create tectonic rift. Magma flows out from tectonic fissures, then cools down, increases its density and as it falls it creates falling forms, e. g. the Red Sea basin, the Gulf of Aden and the Danakil Depression. The same processes cause a constant decrease of the Afar Triangle level (Fig. 3, 4). In the future (over millions of years) this region will probably be flooded with water and will become a new sea. Consequently, the Somali Peninsula is going to be cut off from the rest of the African continent (Chorowicz, 2005; Waltham, 2005, 2010; Bojanowski, 2006; Asrat *et al.,* 2008; Morell, 2012). The Afar Depression, along with Iceland, is one of two places on Earth where a mid-ocean ridge can be studied on land. In the east part of the Afar Triangle, on the borders of Djibouti, the dominant landforms are four great rift valleys. The deepest and most active of them contains Lake Asal (Asalie) and the marine bay of Ghoubet.

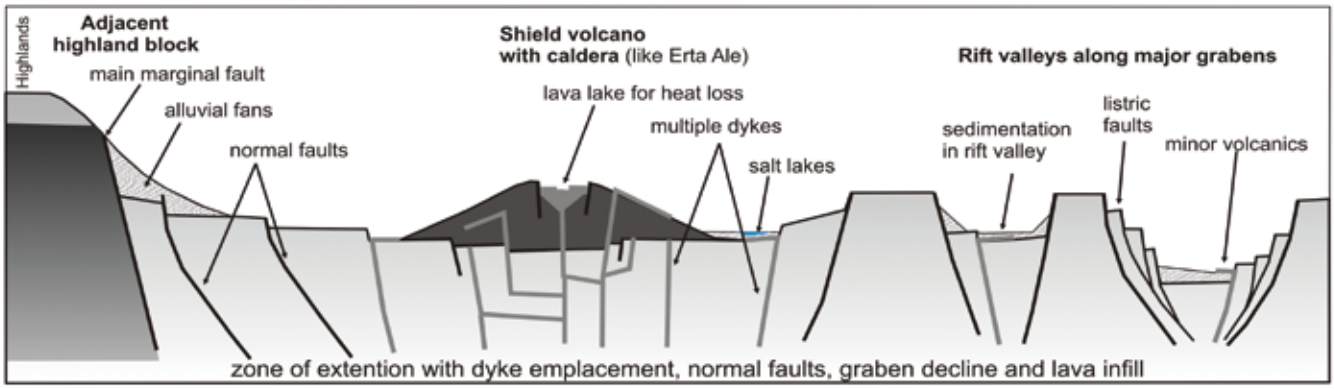


Fig. 3. Diagrammatic and greatly simplified profile showing the main features of ground extension in the Afar, incorporating features of both the Erta Ale volcano in the Danakil Depression and the main grabens in the Djibouti sector (after Waltham, 2010, slightly modified)

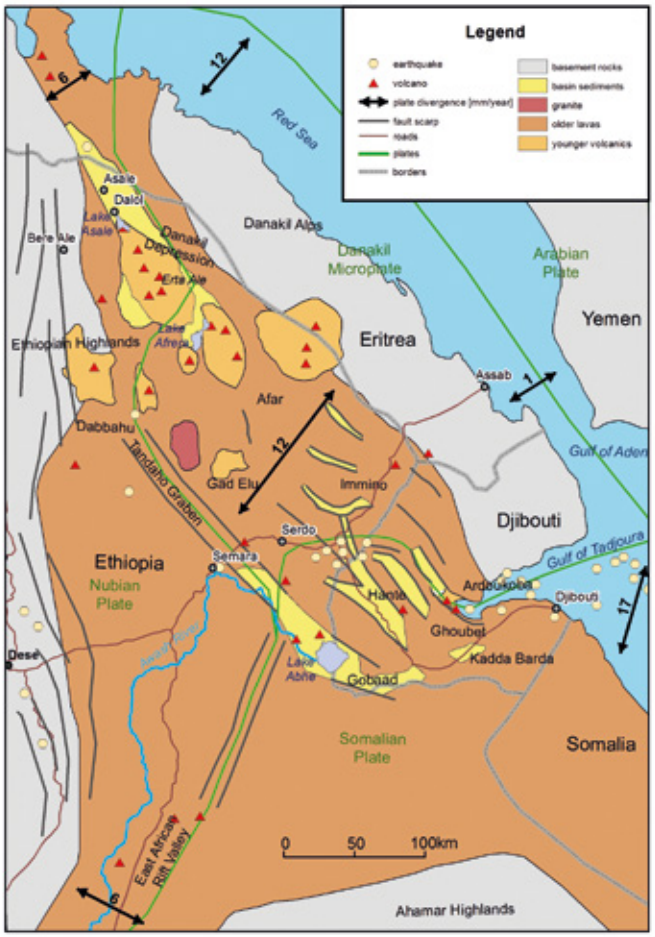


Fig. 4. Geological and tectonic sketch of the Afar Triangle (after Waltham, 2010, slightly modified)

Fig. 5. Lava lake in volcano Erta Ale crater, photo Z. Preisner

The salinity of Lake Asal exceeds 34%. The length of the rift is 70 km, its width is 15–20 km with cliffs up to 600 m high. The most southerly rift valley has been largely filled with sediments brought by the Awash River (the only river in the Afar Triangle). This is also the place where Lake Abhe (more than 200 m above sea level and now only 15 m deep) is situated. This region is best known for its hundreds of splendid travertine towers. Each tower was formed where a carbonate-saturated, geothermal spring emerged in the contemporary lake floor and deposited the calcite due to reaction with lake water (Waltham, 2010).

In the northern part of the Afar Triangle, there is the Danakil Depression – a massive rift valley between the fault scarps of the Ethiopian Highlands and the Danakil Alps (Fig. 4 and 17). Cut off from the sea since the Pleistocene, the Danakil Depression has lost its water because of desert evaporation and is dry down to Lake Dalol (acid water), 126 m below sea level. Lake Afrera is another salt lake which lies 118 m b.s.l. Between these two lakes, there is the multiple shield of volcano of Erta Ale, occupying most of the depression floor. It is the largest and most active of all 34 volcanoes (5 active) situated in the Afar Triangle. The Erta Ale is a typical shield volcano with gentle slopes and elliptical shape due to its location over a major fissure zone along the axis of the Danakil Depression both the central vents and the main parasitic vents. Its perimeter lies more than 100 m below sea level and the summit rises to 613 m above sea level. The Erta Ale is an unusual volcano because of the lake of hot, liquid lava in its crater (Fig. 5). It has been active permanently, for at least 100 years. Currently the lake of lava lies within the central vent, very spectacular pit crater – which is now 150 m wide and 80 m deep (Briggs, 2010; Waltham, 2010). The Erta Ale is the most frequently visited volcano chain in the region (Briggs 2010). The least common volcano in this site is Dallol, which is very flat and only 34 m higher than the surroundings lying in the depression. It covers an area of 3.2 x 1.6 km. Dallol is the lowest situated active volcano in the world, and its peak is at 46 m below sea level.

Fig. 6. Small salt lake located about 5 km south of the Dallol Volcano, photo Z. Preisner

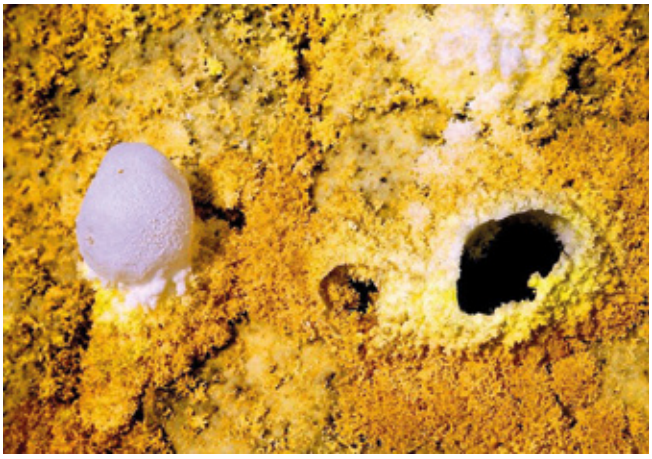


Fig. 7. Gentle saline balloons in Dallol Volcano, photo Z. Preisner

Fig. 8. Salt lake with water-saturated acids and sulfur compounds, photo Z. Preisner

Fig. 9. Salt-minerals walls on the western edge of the Dallol volcano are subject to weathering processes, photo Z. Preisner

Fig 10. Salt mushrooms structures near the Dallol Volcano, photo Z. Preisner

Fig. 11. Lava from Erta Ale Volcano, photo Z. Preisner

The last eruption (1926) created a large cavity in the central part of the volcano (http://volcano.si.edu/). Layers of salt up to 2500 m thick lie in the ground of Danakil Basin. They were deposited for millions of years in a sea basin, which was still connected to the Red Sea. The magma chamber lays relatively shallow here, and it causes, heat to rise through the ground. Also gases and hot water supersaturated with salt rise through the ground. The effect of this is creating exceptionally colourful crystals and stalagmite structures on the surface of the crater of the Dallol volcano, which makes tens of hectares of the region geologically extraordinary. It is an iridescent miracle of nature (Fig. 6).

There are countless salt structures: mounds, towers like cut trees 4 m high or salt mushrooms with caps with about 2–3 m diameters. Next to them smaller forms are also located. This place resembles field of salt brushes and meandering rollers covered with crystals. White salt precipitates out of small, gurgling geysers. It creates small mounds, and cones and below, where water flows slowly there are small terraces composed with numerous levels. Where structures are dead, their colours change from yellows and oranges, through red, to deep red and browns. In places there are also delicate white „*balloons*". They precipitated out of salt gases, which create sensitive edging, so thin that they often pop in the wind (Fig. 7). Remnants of the balloon are only the base of the hole, by throwing gases got out – it creates some kind of net. Very hot and saturated with acid compounds water gathers in bigger hollows. Above them sulphuric fumes lift. They are dangerous to humans and make breathing difficult. Still they are very beautiful because of their unusual colouring and so is the water – it sparkles with many tints of green (Fig. 8). Within these ponds long garlands of small salt dikes run rising above the surface of the water and some of them just below it. It is better not to swim there – the liquid is very hot and is more acid than water.

Near the west side of the volcano base there are fantastic salt walls several meters high. It is easy to see their several centimeters thick layers of salt divided by dusty dark brown sand (matter). These brown layers were created during rainy seasons, when the salt surface was flooded, dust carried by the wind fell onto it and then sunked to the bottom (Fig. 9). During the dry season water evaporated and another layer of salt was precipitated. Nowadays, we can see the beautiful structure of the salt layers and silt here. It is even more fascinating because of the erosion which created the salt world (towers, pillars, ravines, choppy surfaces).

To the south, there is a plain area with fine polygons created by white salt surrounded by brown thorns and flat „bowls" with diameters of several centimeters and slightly erect brims. In this scenery we can find another unusual place. It is gurgling water basin about 50 m in diameter. Here and there small yellow fountains rise, the colour is given by compounds of sulphur from the ground. In places, especially near lakesides, the water is blood-red. The basin's shores are made of different tints of brown and yellow salt in shapes of crystals, icicles (reminiscent of cave stalactites) or laces. Nearby, a region of circular structures can be found. Their diameters are about 2–3 m (Fig. 10). Some are filled with water and some are dry and full of small beautiful terraces.

The dominant rocks within the Afar Triangle are flood basalts and fresh volcanic lavas (Fig. 11). The oldest layers of these are dated from about 24 millions years. Locally, these lavas have a thickness of 4 km (Beyene, Abdelsalam, 2005; Waltham, 2005, 2010; Schüter, 2006). To the East of the Danakil depression, in the Danakil Alps mesozoic limestones are found. To the West and South the Ethiopian Highlands consist of Precambrian metamorphics and granites. Around them there are Mesozoic sandstones and limestones or Eocene and Oligocene alkaline basalts. These lavas are examples of outpourings, which were precursor to the rifting of plate divergence (Waltham, 2005; Schüter, 2006).

Fig. 12. Salt flowers in Danakil Depression, photo Z. Preisner

Fig. 13. Danakil desert – western part of Danakil Depression, photo Z. Preisner

Away from the lava flows, the Danakil is covered with plains of sand or mud and evaporates. In the past these regions were regularly flooded with sea salt water and nowadays are vast, flat areas where barchans wander. The barchans are formed by the wind with sand and can be 2 m high and 6–9 m wide. Other territories are covered with layers of salt – an afar "white gold", which were formed after evaporation of water (Melvin, 1991; Waltham, 2010; Morell, 2012). Littoral and reef marine limestones of the mid-Pleistocene age survive in places around the margins of the Depression, remnants of its occupation by an arm of the Red Sea 65 000 years ago (Waltham, 2005, 2010; Schüter, 2006).

The surrounding of Lake Dalol is distinguished by numerous hot mineral springs and fumaroles, which have created unusually colourful crystals and evaporite formations, i.e. compound of sulphur, potassium, iron, phosphorus or salt (Fig. 12), which were precipitated from gases and hot waters (Melvin, 1991; Schüter, 2006; Preisner and Preisner, 2010; Waltham, 2010). Colourful mineral crusts and colourful water of the thermal springs (because of sulphur and algae) make the landscape almost unreal and very beautiful. Afrera Lake, compared to Dalol, is less spectacular but it is also surrounded by lots of geothermal springs. Its brines are being exploited by extensive salt pans, where precipitation is very rapid because of the high temperatures (Waltham, 2010).

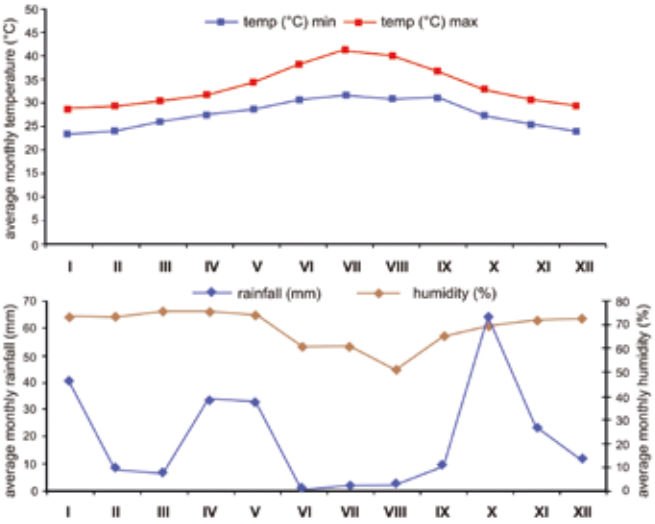


Fig. 14. The average monthly temperature, humidity and precipitation in Djibouti from 1992–1998 (Harris, 2008)

Climatic conditions – the hell on earth

The Danakil Depression characterises with hot, desert climate and a name "hell on earth" is absolutely not mistaken here (Fig. 13). There are two main seasons here: cool (from October to April) with high humidity and hot (from May to August). The cool season is characterised with average temperatures of higher than 25 ˚C, that means it is still hot from the European (Polish especially) point of view. The heat is even worse during the hot season (Fig. 13). In May, June, August, and October wind blows from the North-East. In summer very impetuous, dry, hot carrying dust winds called *Gara* (The Fiery Wind) are common. They intensify the feeling of heat, which is heavy because of lack of shadow, high humidity (40% in summer, about 90% in winter) and high temperatures (Fig. 14). The average annual temperature is between 34 and 35 ˚C but it can raise to even 50 ˚C (Briggs, 2010). Rainfall is very variable and irregular, various in different years. For example in 1996 the sum of precipitation was only 23 mm and in 1993 was 773 mm. Most of it falls in very short time (Harris, 2008) creating torrential rains (Fig. 14).

The Afars

The Afar Triangle is absolutely one of the most inhospitable places on the Earth. Most of its area is covered with desert. In many places, it is harmful for living creatures as fumes i.e. compounds of sulphur escape from cracks in the dried up ground. Along with seismic and volcanic activity and extremely hard climatic conditions it does not encourage settlement. In the Danakil Valley it rains seldom, there is shortage of water and food. There is no vegetation/greenery and no shadow. It is easy to think that this region is unsettled. But this is not true. It turns out that for centuries Afars have been living in the desert lands of the Danakil (Fig. 15).

The Afars, with over one million inhabitants, are an indigenous African population (Fig. 16). Their language, afar-saho, is part of the Cushitic branch of the Afro-Asiatic family. They probably came from the highlands of the south-eastern Ethiopia, but about 2,800 years ago, during pastoral wanderings, they settled desert lands of the Afar. The name is derived from the region, given by their neighbors'. Sometimes they are also called "the Danakils", but they do not accept this name because of its pejorative and contemptuous undertone in the Arabic language. Afars perceive themselves as the first residents of this part of Africa. There may be a grain of truth, because on this land one of the oldest australopithecus remains "Lucy" was found (Popiel, 2007; Briggs, 2010). The discovery was made in the valley of the Awash River, in the National Park of Yangudi, to the South of the city of Semara and to the East from the city of Mille (Fig. 17). The remains of our primeval mother can be seen in the National Museum in Addis Ababa.

There are two groups of the Afar society: a dominant class, called *Asaemara* (in Afar language– reds) living in the surrounds of Asajta and a working class *Adaemara* (whites) living in the middle of the desert. The traditional occupation of Afars was nomadic herding, and a part of them are still nomads. Some of them pasture goats, camels, and sometimes cattle. The others excavate and trade in salt, which is in abundance in the Danakil Basin. There are lots of open-cast mines in the surroundings of the salty Lake Asale (Karum) (Fig. 16), located in a depression, over 100 m below sea level. In this place, where the sun is merciless and where there is no shadow, Afars with only primitive hatchets only, chop out salt tablets – *amoles* from the ground (Fig. 15B). Then the tablets are shaped into blocks 30 x 40 x 10 cm in size and about 6 kg in weight. Afterwards they are combined into packages of 20 pieces (one package is about 120–150 kg in weight) and mounted on the back of a camel. A caravan of several dozen of these animals travels west for a few days to Mekele, about 100 km away. Salt tablets can be sold there or traded in other necessary goods. The further the mine the higher the price is. So it rises from 2 to 15 birrs (ETB- Ethiopian currency, 100 ETB is about 3,72 EUR, 5,2 USD or 15–16 PLN). Work in salt transport is very hard and exhaustive. Each camel is able to do only 3 routes during one season, which lasts from November to the beginning of March. Working in other months is not possible because of the heat. The value of salt is very high in this climate – it keeps water in an organism – surviving without it is very difficult. That is why salt is called "the white gold of the desert" here. In the past centuries lumps of salt (*amoles*) were country-wide legal tender in Ethiopia, in some areas they still are, for example in Afars' lands (Popiel, 2007; Preisner, 2010). The "white gold" excavations becomes an extremely hard and exhausting place to work which causes health problems. The sun reflecting from omnipresent white crust of salt severely damages eyesight (Fig. 16) (Harris, 2008; Podsiadła, 2011).

The salt is one of the reasons why Afars guard their territory and are distrustful of visitors. Controlling foreigners' wanderings is easy for them, because of the fact that only the Afars truly know this inhospitable Danakil desert's secrets and are able to travel across it freely.

Fig. 15. Afars near the Lake Afrer: A – modest huts ari; B – work on the extraction of salt; C – Afars village; D – Afars women, photo Z. Preisner

Fig. 16. Salt field, teepee structure, Asale Lake region, photo Z. Preisner

That is why in the past and even nowadays it is difficult to visit this region. Even until 1932, locals used to rob and murder those who entered their land, especially men (Briggs, 2010). Another reason, why the Afars are very suspicious about the outside world, is their basic will of surviving, which is easy to understand in such hard living conditions. Because of that there are also domestic conflicts – between the Afars and the Issa for example. The Issa are people of a Somali clan, who settle southern Djibouti. A noticeable conflict took place in 1966 when the Issa wanted to annex Djibouti (French Somaliland at that time) to Somalia, and the Afars living there were opposed to it. Unfortunately even the Afar clans and families are not very friendly to each other. Apart from open acts of violence with daggers and recently fire-arms, they steal animals, kidnap women, and fight for water. Not so long ago it was common to practise killing an enemy to marry a woman, massacres between clans, eating opponents' hearts or keeping trophies made of opponents' genitals.

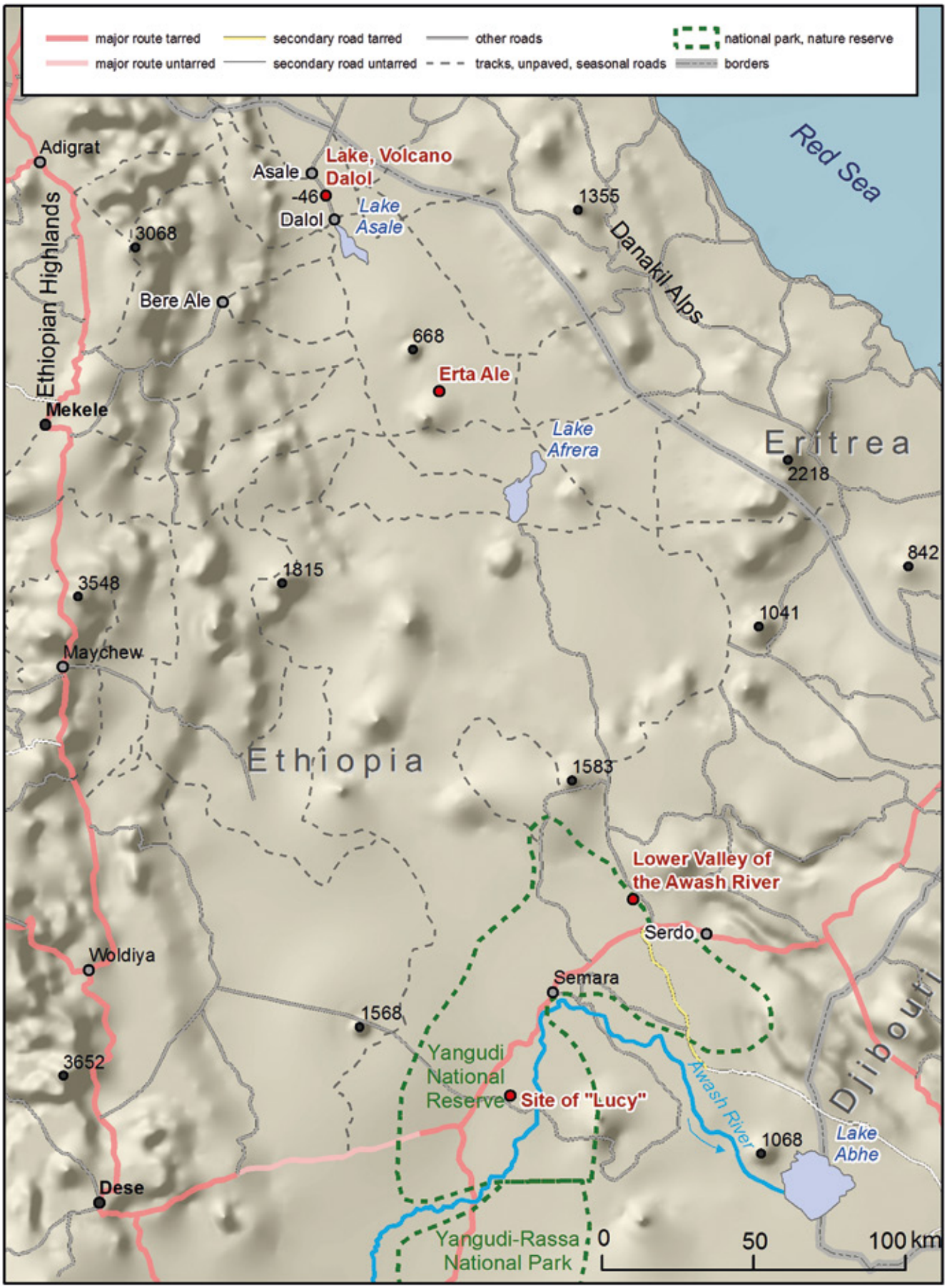


Fig. 17. Roads on the Danakil Depression (after: Etiopia, Somalia, Erytrea, Dżibuti, Mapa 1:1 800 000, 2010, ed. 5, World Mappig Project, Reise-Know_How Verlag, Bielefeld)

All of this makes the Afar people completely misunderstood by Europeans and even by other Ethiopians. For centuries they did not want to accept the state's control and wanted to live in harmony with their own tradition. The Ethiopian government tries to change this situation: in last decades, previous nomads have settled on fertile grounds near Asajta and now occupy it with agriculture (Briggs, 2010). Despite this, most of the Afar still practice traditional nomadic lifestyle. They value their freedom too highly to exist away from their home – the desert – even though living there is very hard (Fig. 15).

During the Afar's migratory wanderings through the desert, they set up temporary settlements, surrounded with thorn fences for protection from wild animals and enemy clans' assaults. Their light and modest huts, called *ari,* are made of palm leaves and mattings. They are easy to carry on camels' backs from one place to another which is usually the women's occupation (Briggs, 2010).

The Afars' diet is very modest and not too varied. There are roasted cereal grains called (in Ethiopia) *kolo*, a very sweat tea or a desert delicacy – a "hot as hell" sauce flavoured with berbere and served with stale rolls. Actually any Danakil bread is stale – suffice it to leave it few minutes in the sun. This basic foodstuff, bread, is made here in quite an unusual way – without using stoves or vessels. It is enough to have round stones, which are in abundance in the desert. They are heated in the fireplace and then stacked with dough. Finally the bread has to be chipped off the stone. The bread made this way is hard but tasty and, what is more important, does not go bad for a long time (Podsiadła, 2011). The other basic foodstuff for Afars are milk and the meat of goats and camels (Popiel, 2007). Milk is also the symbol of hospitality, which is one of the most important features of the Afar's culture, despite the bloody customs mentioned earlier. If anybody is treated with warm milk, it means that he is treated as a family member. If anything wrong happens to him, he is treated by law of revenge like any other clan member. The customary law sanctions bloody revenge but harshly punishes murder or adultery. Every clan leader is personally responsible for everything that happens on his territory, for the safety of family members and travelers. It is very important to respect the Afars' culture and traditional law. The person who does not care about the traditional rules of this society, can expect serious trouble (Popiel, 2007).

The majority of Afars' profess Islam, because of their intense links with the Arabs. Their religion is not devoid of some primeval beliefs and practices, proper to Cushitic people – e.g. animistic conviction about existiance of powerful spirits of trees and shrubs. In spite of permission for polygamy, Afars usually live in monogamous relationships. It js not surprising, because their living conditions do not allow to provide for several wives. Afars look for partners generally among their cousins (mainly paternal ones) mainly when they are very young, very often at the age of 10 (Briggs, 2010).

Comparing to other inhabitants of the plateau, the Afars are very tall and dark-skinned. They usually wear light, cotton togas draped on one shoulder. The women additionally wear long, brown skirts and they often leave breasts naked, in spite of the fact that they are Muslims (Briggs, 2010). To make their appearance more attractive, women often have their teeth filed to triangular shape. Very popular jewellery are garish necklaces, heavy earrings and brass bracelets. Women wear complicated braided hairstyles, and men usually wear traditional afro (Briggs, 2010). Afars generally pay a lot of attention to their hair, not only to its appearance but also its care. Commonly, amongst both women and men, a clarified butter, called *ghee*, is used to lustre hair and protect it from burning sunray. Afars are not very eager to let somebody take a photo of them. Those, who eventually give permission to eternise them with camera, demand even 50 birrs per photo. It is nearly 25 times more than other tribes would do (Popiel, 2007; Briggs, 2010).

Tourism

Until the year of 2000 the Danakil Valley was completely unreachable to tourists. Nowadays it is still not very well known or popular destination. Those who decide to go there come across many difficulties.

One of these is obviously the unbearable climate. The best period to visit the Danakil Valley is between November and March with the lowest temperatures. It is very important to take care about proper protection from the sun and comfortable clothing. The desert nights are quite cold so tourists have to take warm clothes. The Danakil Desert visitors have to be self-sufficient with food and water for a couple of days. Important, they have to provide not only for themselves but also for the guide and the escort. Theoretically, they should take care of it by themselves, but in practice they ask tourists for everything. Camping and cooking equipment is very useful so is firewood (at the Danakil Desert does not grow anything you can make a fire with) and something to protect from the sun while setting a camp (there is no shadow in the Danakil Desert) (Briggs, 2010).

Trying to travel across the Danakil Desert can always be a failure: every mobile network is out of range, calling assistance is impossible, there are no sign posts and even roads. It is necessary to hire guides, cars with spare parts or camels, drivers, mechanics and an escort of soldiers or police. It is also important to remember that having the special permission of the federal authorities or even the Afar government, is not always enough for inhabitants of the desert. They can treat a tourist like an intruder in their territory (Popiel, 2007; Briggs, 2010). The area is under control of the police and military troops but not so long ago Afars kidnapped five British tourists for ransom. They were found a few months later in Eritrea. A few months earlier some French people experienced a similar "adventure" (Preisner, 2011). In January 2012 another tragic incident happened. It took place near the Erta Ale Volcano, according to state Ethiopian television – five tourists died and two wer injured (Krawczyk, 2012). Permission to get into the Afar can be acquired from the tourist information office in Semera (from the South) or in Mekele (from the North-West). In these places hiring a guide is also possible (100 ETB per day, camels (50 ETB per day) or borrowing skins of water (Briggs, 2010).

Entering the Danakil Desert is possible by two roads, through the city of Berahylie (Berahile, Bere Ale) or Serdo (Fig. 16). The north route is shorter, in addition, it is used by caravans carrying salt from Lake Asale. The best option is to make a route around – through Berahylie to Serdo, or in the opposite direction (Briggs, 2010). Berahylie is quite a large town, in an unusual way uniting two cultures and different worlds – the culture of Highlands and of the Desert. The stone Tigre houses can be seen here as well as the modest Afar huts. Additionally, in the suburbs, there are camps of salt traders who stop there on their way from the Danakil Desert to Mekele and can unload their camels and rest. About 50 km of bumpy road to the East from Berahylie, there is a very popular base for people visiting Dallol and the Lake Asale, the Hamed Ela village. After visiting open-cast salt mines it is good to choose the direction to one of the most interesting and the most gruelling attractions of the Danakil – the Erta Ale Volcano. Slopes leading to the peak are quite gentle – climbing them takes about 3–4 hours. Despite that, the way up is exhausting because of the heat, lack of shadow and a bumpy path – it is essential to remember this when preparing for the trip. The effort is rewarded with the unique possibility to admire a lake of lava. Travelling further, one can visit the Afrera Lake with its emerald-green water, fed from thermal springs and surrounded by dormant volcanos: Borale and Afrera. It is also possible to see the Afars excavating salt. The travel can be finished by continuing to Serdo (if one goes from Berahylie). Tourists can also come back using the previous route (Briggs, 2010) (Fig. 17).

Summary

To conclude, the Afar region, within the Danakil Depression is a place worth visiting, which recompenses the traveller all of the difficulties he has met. All one needs are: the patience and respect to the Afar's culture, the submissiveness to them, as to the surrounding nature and obviously proper supplies and funds. It is an extraordinary place considering its nature. There are not so many pieces of animated nature but miracles of the inanimated are so colourful, beautiful and majestic that they provide wonderful attractions by themselves.

It should also be mentioned that the whole region is in theory accessible without any limits, so a number of tourists is slowly on the rise. This can result in slow destruction of salt structures through trampling. Decisions and actions for protecting this area should be undertaken, also by international organizations. The Danakil Dessert should become a national park and be added to the World Heritage List of UNESCO.

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