

The Tell es-Safi/Gath Archaeological Project



Manual for Volunteers & Students

Summer 2010

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Aren M. Maeir & Itzhaq Shai

Introduction:

Welcome to the Tell es-Safi/Gath Archaeological Project! In this manual you will find general information about the coming season, of both a technical, administrative and an archaeological nature. Clearly, the manual is meant as but a brief introduction to what will go on during the excavation season. Please read the manual carefully. If you should have any additional questions, do not hesitate to ask the staff about any aspect described within, or for that matter, any part of the ongoing work at the excavation.

The excavations at Tell es-Safi/Gath have been going on for more than a decade (since 1996), directed by Aren Maeir, of the Institute of Archaeology of Bar-Ilan University. The team members of the excavations include professional archaeologists of various types, and volunteers and students from Israel and throughout the world. Although many languages will be spoken at the excavation, it is our policy to adopt English as the official language so as to enable as many of the participants as possible to understand what is going on. Please note: if in any case something is not clear or is not understood, do not hesitate to ask. One of the main objectives of this excavation is to serve as a vehicle for teaching and learning about the past, and about the methods and theories of field archaeology. We are eager to answer your questions!

Many of the volunteers are newcomers to Israel and may not be familiar with the lifestyles, habits, and proper conduct in the land. In order to help you feel comfortable and stay safe, below there are several hints on daily conduct.

The staff members (see below) will do all that they can to help the team members on a regular basis. Please do not hesitate to turn to the staff members for assistance.

Since this is a large group with many people and a very crowded schedule, we all have to make an effort to help one another and keep to the schedule as strictly as possible. Otherwise, things will get chaotic ...

Primary Excavation Staff

Director: Aren Maeir

Logistics: Nir Reiss

Registrar and Volunteer Coordinator: Silvie Yogev

Supervisors: Alex Zukerman, Jeff Chadwick, Itzik Shai, Joe Uziel, Louis Hitchcock, Amit Dagan

Assistant Supervisors: Debi Cassuto, Ely Levine, Jill Katz, Eric Welch, Zach Margulies, Mike Ellingsen, Cynthia Shafer-Elliot, Dean Smith, Brent Davis, Sam Crooks, Jo Verducci, Sharon Staub

Director of Archaeological Science Program: Steve Weiner

Archaeobotanist: Udi Weiss

Materials Science and Cosmogenic Dating: Elisabetta Boaretto

Geoscience: Clive Trueman

Organic Residue Analysis: Dvori Namdar

Physical Anthropology: Marina Faerman

Zooarchaeologists: Liora Horwitz, Haskel and Tina Greenfield

Architect: J. Rosenberg

Photographer: Richard Wisikin

General Weekly Schedule (for additional details – see weekly schedules below):

Sunday:

11:00 – Bus from Masmiyah junction to Kibbutz Revadim
11:30-13:00 – Getting organized in room, etc.
13:00 – Lunch
15:00-18:00 – Pottery washing or other office-related activity (on first Sunday – tour of tell)
19:00 – Supper
20:00 – Lecture

Monday – Thursday (regular weekdays):

04:45 – Wakeup (on your own!)
05:00 – Coffee/tea and cookies in rooms
05:25 – Bus leaves for Tell
06:00 – Excavations begin
09:00-09:30 – Breakfast on tell
11:00-11:15 – Fruit break on tell
13:00 – End of work
13:30 – Lunch in kibbutz
14:15 – Pottery washing
16:30-19:00 – Time off (save for days with field trip)
19:00 – Supper
20:00 – Lecture (most nights)

Friday:

Same as regular weekdays till end of dig at 13:00
13:00 – Bus to kibbutz
14:00 – Bus to Masmiyah junction (for those interested)
Free time until Sunday morning.
Those staying for the weekend should confirm this with Silvie no later than the beginning of the week (Sunday) before the weekend.

Travel and Communications:

Transportation: A bus will take you every day from the kibbutz to the site and back and to and from the field trips. On Sundays and Fridays, bussing from, and to, the Masmiyah junction will be available. All travel outside of this “circle” is the responsibility of the volunteer/student. In all cases in which you are planning to leave the kibbutz (during the week or on the weekend), please notify Silvie. Silvie will go over your itinerary to make sure that it is safe. There is a possibility to arrange car rentals for the weekends. The cars will be delivered and returned at the kibbutz. If you are interested, please speak to Silvie no later than the Monday before the weekend.

Telephone: There are public phones in the kibbutz dining room. These can be used to dial out (including international calls) if you have a phone card. As you have already been notified, a mobile phone rental service is available through the Talk-n-Save company (<http://www.talknsave.net/default.asp>) – we advise to arrange this before arrival. If you are interested in this while at the dig, please speak to Silvie.

Computers: There will be several computers that will be available for the team members for checking email. Since this is a service that is required by many, there are many team members, and the number of computers is limited, please use this service

in a considerate manner. Do not stay on line for extended periods! Take care of your correspondence – but give others access to this service. Please note: the computers of the staff are not to be used by other team members – they are meant for work-related tasks. PLEASE NOTE – **it is forbidden to download programs, music, movies, etc., on to any of the computers provided by the project (due to fear of viruses and malware)**. There will be wireless coverage in the entire region of the base camp, so if you bring a laptop computer (which should be kept locked up when not in use...), you can use it freely. We highly recommend that those of you who will bring a laptop computer bring with them a “cable lock” for their computer as well.

General Administration:

Health: If you should have any health problem, please notify a staff member at once. While on the excavation, there is a first aid kit on site and some of the staff are trained medics who can provide first aid treatment for various kinds of injuries, ailments, etc. The dig office has first aid supplies for cuts and bruises as well. For more serious injuries/ailments there is a nurse on the kibbutz, and if necessary, the nearest hospital is about a 20 minute drive away. Remember – all team members must have up-to-date, comprehensive medical insurance.

Laundry: For those who are interested, it is possible to have your laundry done at the kibbutz laundry (entails an extra fee). If you are interested, please speak to Silvie who will coordinate this.

Shopping: There is a small supermarket on the kibbutz that is open most afternoons (exact times will be posted by Silvie). This shop carries a variety of foods, drinks, cosmetics, etc. Feel free to use this in your free time. In addition, next to the communal area of the dig there are a few vending machines. In the vicinity of the Masmiyah junction there is an assortment of restaurants, coffee shops and stores. During your free time, you can go there (it is about a 20 minute walk to Masmiyah Junction - there is no bus from the kibbutz to the junction); but please, if you do go, notify Silvie (or if she is not around, another staff member) and do it in an organized manner. If you should be missing an important item that cannot be found either in the kibbutz store or at the Masmiyah junction stores, please notify the staff.

Pool: The pool is open during the afternoons and you should feel free to use it. If you are asked, tell them that you are from the dig. In any case, do not use the pool if the lifeguard is not present (and the pool is closed).

Security: Please keep valuables either on you or locked away in your room. Do not leave doors open when you are not around, even if you are leaving for but a brief time. Do not leave valuables (e.g., cameras, computers, wallets, etc.) unattended in open areas – even for a very short time!

Safety and Security:

The safety and security of all of the participants in the excavation is at the absolute top of our priorities. Please follow the instructions given here, as well as any brought up during the dig. This is based on years of experience and familiarity with the Tell and its environs.

On the Tell and its surroundings there are many pits and holes, some of which are hard to see. Please! Do not walk around the Tell by yourself, save for within the excavation areas and going to the designated dining areas, logistic zone and toilets. In any case, do not leave the excavation area without notifying the staff member in charge of your area. Also, we suggest that you use the “buddy system” when going to the toilets.

Since many of you have little experience in such hot climates and field conditions, it is important to follow some basic patterns of behavior while in the field:

- 1) Always wear your hat and closed shoes (preferably work shoes/boots; no sandals, flip-flops, etc.)
- 2) It is strongly advised to wear lightweight, closely woven, cotton long-sleeve shirts and long pants. Although we all use sunblock, it does not remain effective for more than 1-2 hours - and melanoma is not a fun experience ...
- 3) Sunblock should be applied regularly and copiously, approximately once every 2 hours. Even when working under a tarpaulin, harmful UV rays still get thru. Make sure to use a sunblock with a high "SPF."
- 4) We advise working with work-gloves. If you did not bring your own, gloves can be bought at the office for NIS 10 a pair.
- 5) Drink copious amounts of water. Drink much more than you think is necessary. Often, people underestimate the amount of water that they require during the day (while doing physical activity, on a hot day, one should drink about 5-8 liters [ca. 5-8 quarts]!!). This can lead to fatigue, and in severe cases, to dehydration or heat-exhaustion (both of which can be fatal ...). It is suggested to use your own canteen that you can refill regularly from the larger water containers. If during the excavation you should feel tired, dizzy, flushed, nausea, and/or a lack of thirst or appetite, these could be the first signs of dehydration/heat-exhaustion. If you are not feeling well, please notify the staff at once! One of the best ways to check for dehydration is the "urine test" (something that should be done in private ...): If your urine is a dark yellow color, you are not drinking enough!



- 6) Personal hygiene is extremely important in hot environments. This is the number one way to fight intestinal and other diseases. Keep in mind that visitors to Israel will be "meeting" new "bugs" that would just love to conduct a short "visit." Thus, make sure to wash your hands with soap and water before eating, and after using the bathroom. This is true both in the field and in camp. If you should feel that you are coming down with something (headaches, stomachache, etc.), please notify the staff immediately, both in the field or in the Kibbutz. If necessary, you can return to the Kibbutz early and/or miss a day at the excavation to recuperate. It is better to miss one day of work than get very sick for an extended period (see health section above). In any case, if you do stay back on the kibbutz for health reasons but would like to still participate in the work, there is plenty to do in the office.
- 7) Although we have never had any security problems, as you all know, the Middle East is a "volatile" zone and one must be aware of all times of potential hazards. Although we have never had to face any "uneasy" security situations, some of the staff are armed at all times. Do not walk off on your own, both during the excavation and when on field trips. If you should see any suspicious people or objects, please notify one of the staff members

Do not go anywhere with strangers, even if the suggested excursion sounds extremely interesting.

- 8) We would like to know where all the team members are at all times. If you have to go to the bathroom during the excavation, please notify your supervisor. If you want to leave the kibbutz for a day, please notify one of the staff members.
- 9) If you plan to travel on the weekend, please make sure to go over your itinerary with the staff, to insure that you are not going to places that might be dangerous.
- 10) If you do travel around the country, DO NOT hitch hike. DO NOT go to less-traveled places unless you are with someone who is both experienced and trustworthy (better safe than sorry ...).
- 11) If you do travel, keep in mind the habits and customs of the people who live in the areas that you are visiting. For example, if visiting an area in which traditional Jews or Muslims reside, it is seen as being extremely disrespectful to be dressed in short clothes – men should wear long pants and a shirt with sleeves, woman should wear long pants/long skirt (below knees), a shirt with sleeves and a kerchief on their head. Since there are many subtle aspects of behavior that visitors may be unaware of, it is best to ask before hand.
- 12) In any case, if you should have any questions, concerns, etc., do not hesitate to ask the staff.

The Excavation

What is a Tell:

A Tell (in Arabic, or Tel in Hebrew) is an ancient Semitic word (appearing in Akkadian and in the Bible [Josh 8:28]), which originally means a ruined settlement. In modern archaeological terminology, a Tell is a multi-period site in which layer after layer of settlement activity from different periods were deposited, one layer on top of the other. In some cases (such as Tell es-Safi/Gath, Hazor, Megiddo, Rehov, etc.), there can be multiple layers (at times even more than 20) representing many periods. The cycle on such a site is that of construction, living, and destruction, abandonment or rebuilding. This cycle is repeated again and again, thus creating the various levels or strata. Each stage in the cycle represents at least one level that we subsequently try to uncover during the excavations. It is the archaeologist job to uncover the various finds and architecture and relate them to the various stages in the “life-cycle” of the Tell.

The Archaeological Excavation:

The primary goal of archaeological research is to uncover information and gain insights about the cultures, lifestyles and surroundings of pre-modern people. In order to do this, we attempt to uncover the material culture of these people as well as study the environment, ecology and related aspects. Due to the ravages of time, rarely do we find archaeological remains in pristine condition, as they were in ancient times. Often, we find only partial remains of the various types of finds. Thus, in order to enable the study and understanding of the remains, we must excavate and record the finds in as careful a manner as possible. Remember! In the end, archaeology is a destructive science. What we have excavated can never be returned to its original state. If we do not excavate and record properly, the information will be lost forever.

Some of the volunteers have prior excavation experience and some don't. In any case, since even those who have excavated previously may be experienced with other excavation/registration methods, it is important to get to know the methods that will be used. On the 1st day of the excavation, you will be assigned to a certain area. Each area has a supervisor who is assisted by an assistant/registrar. The supervisor will give detailed instructions on how, why and where to work. Please listen and follow these instructions closely. In general, do not initiate work on your own without discussing it first with the supervisor. Also, if you have any questions, never hesitate to ask. Even if the supervisor is busy, as soon as possible he/she will relate to your question. Below are some general hints regarding the excavation procedure. Detailed instructions and explanations will be given by your supervisor.

There are numerous terms that you will hear used during the excavation. Here are some of them:

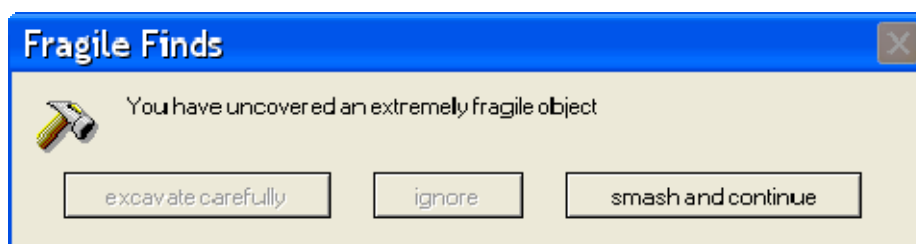
- Stratum – A distinct level of human activity on the tell. It usually implies a level that is seen in many places on the tell.
- Locus (plural loci) – The smallest functionally definable area in the archaeological excavation. A locus can be of different sizes, depending on the type of activity that it represents, such as a floor, a pit, a dump, a foundation trench, etc.
- Basket – The unit that is used to differentiate between the various finds deriving from a single context. For example, one can find pottery, bones, scarabs, etc. from the same locus. Each will be put in a separate basket.

Throughout the entire excavation process we try to work as cleanly and orderly as possible. That means that on a regular basis we collect, clean, straighten, brush, etc. Although it might appear that archaeologists suffer from a bad case of *obsessive-compulsive disorder*, in fact, a clean, orderly excavation enables one to reveal, observe, and understand, more of the archaeological evidence. The rule of thumb is that in any given area that one is excavating, one should try to peel away the features, loci, layers etc. in an orderly fashion. That means that we won't mix between two levels but rather try to excavate one level before going to the next. Or, if we are excavating a pit that is dug into earlier levels, we will excavate the contents of the pit itself, before we dig the surrounding, earlier, material. In most cases, one should excavate in a level, horizontal manner (save when excavating sloping features). In most cases, you will be excavating in 5X5 m squares. As one goes down in a square it is important to keep the sides of the square (the balks) vertical. They should not slope either inwards or outwards. Otherwise, the size of square will change as we excavate. At the end of each day of excavation (but very often, several times a day as well...), the area that was excavated is brushed "squeaky" clean. Among other reasons, this is to enable the dampness during the night to help outline features that will be seen first thing in the morning, but also simply to be able to see features as we are excavating. While excavating if you should reveal a find (pottery, bone, etc.), do not remove it from its place. First – notify the supervisor. Then, one must excavate the area around it in order to uncover the more general context from which the finds is derived. This will enable us to better understand the stratigraphic context of the find.

The various tools that you will use (Hebrew name in parenthesis):

- Pickaxe (*makush*) – Used for breaking up hard soil. Use the pointed edge (not the flat side). Pick up the pickaxe and let it fall – don't hit the dirt with force – it can break the finds and your back! In most cases, this tool is used only in the upper levels when you have to break through the hard upper surface.

- Hand-pick (*patiche*) – Handy tool for digging and scraping. Use the pointed side for digging.
- Hoe (*turiyah*) – Used for collecting dirt to be put into buckets. Can also be used to scrape surfaces. Do not dig with it, since the wide blade can damage artifacts and surfaces. When collecting dirt with a hoe into a bucket, make sure that you have checked that the dirt does not contain artifacts.
- Trowel (*masterina*) – The trowel, and especially the excellent pointed *Marshalltown* trowel, is probably the most important and handy tool used in the excavation. It can be used for scraping, digging and straightening. It is easy to control, has a sharp edge. This is THE tool of choice of the competent field archaeologist. Each team member should have his own (you were asked to bring one with you – details in the registration package).
- Brush (*mivreshet*) – Used to clean surfaces, to uncover features (such as mudbricks, floors, etc.), and to prepare for photographs or at the end of the day. Can also be used to collect dirt. Brushing regularly during the excavation process is important since it enables us to see features that otherwise would have the same color as the surrounding earth.
- Bucket (*dli*) – Used for collecting dirt to be dumped. Also used to collect pottery and/or other finds (such as dirt samples for analysis, sifting, floatation, etc.). Buckets with finds must be tagged. Do not mix up the dirt (black) and finds (colored) buckets.
- Wheelbarrow (*meritza*) – The dirt that will be dumped is poured into the wheelbarrows that are then pushed to the dump. Do not fill the wheelbarrows too much, since it will be hard to push them and they could tip over on the way to the dump (and then, cleaning it up is extra work ...). When emptying the wheelbarrow on the dump, make sure you dump it at the farthest point, so that the dump extends outwards and not inwards towards the excavation.
- Sieve (*mesanenet*) – When excavating features/loci that potentially could contain small finds, the dirt from these contexts is often sifted. In such cases, the dirt from these deposits is taken to the area where the sieve is located and someone is responsible for sifting. The dirt is poured on the sieve and it is shaken. The dirt falls through and then one checks the remainder for cultural remains. Remember – do not mix between the finds from different contexts.



Documenting the Excavation:

As mentioned above, since the archaeological excavation is a destructive process, proper documentation of the process and finds is of cardinal importance.

The excavation is conducted in 5X5 m squares which are part of the site-wide grid (all of which fits into the general mapping grid of Israel). The actual area excavated within the square is usually smaller (most often 4.5X4.5 m) since we leave unexcavated areas (balks) between the squares. These balks serve as borders between the squares that enable movement between them. In addition, the information that is

seen in these balks (the stratigraphic sections) is of importance. This gives us a record of the depth dimension in the stratigraphy. And in fact, these balks are later recorded to preserve this very information.

Throughout the excavation there will be a constant measurement of heights.

Whenever we open a new basket, begin or end a day, open or close a locus/wall, heights will be taken. This provides important information on the relative position of the find, context, etc. in relation to its surroundings. Heights are taken using a level (either a manual or laser level). Near the excavation area there is a “benchmark” which is an accurately measured point that serves as the basis for all heights taken in the area. All heights are taken in relation to this point. The actual method of taking heights will be demonstrated in the field.

As mentioned above, the basic unit in the excavation is the locus. One opens a new locus when new features appear. For example, if the matrix or color of the earth changes, this will warrant changing the locus. If a new wall emerges, the spaces on each side of the wall will be defined as new loci. Each locus is given a number consisting of 6 digits: the first two numerals are the year of excavation (this is the 13th year), the third denotes the excavation area, and the last three are the number of the loci opened in the respective area (for example 132303). The supervisor and registrar of each area will document the information about each and every locus based on a standard locus card (see attached).

Walls are documented in a similar manner as loci, using the same successive numbers. There is a similar Wall card for filling out information (see attached).

Every find is put into a Basket which has its own number (“name”). The commonest find in the excavation is broken pottery sherds, but there are other classes as well (stone, bone, shells, etc.). In each locus there can be many baskets. Each basket receives a 7 digit number, using the same principal as with the locus (the first two digits - year; 3rd digit - area). For each basket there is a tag/sticker that provides the information on where it was found and what type of material is in the basket. It is important not to mix between finds from different baskets and/or loci. As baskets are opened, information is entered in the Basket List (see attached), and its location is marked in the Daily Graphic Diary (see attached).

At the beginning of every day, the supervisor has a new plan of the area which is called the Daily Graphic Diary (DGD). The plan is based on the situation at the end of the last day of work. On this plan, information on all the walls, loci, baskets and other aspects are written. To enable one to enter a wide range of information, several colors are used: Red = Loci; Green = Walls; Black = Baskets; Heights = Blue.

As mentioned above, the stratigraphic sections provide important information on the stratigraphy of the site. Towards the end of the season, all (or most) of the stratigraphic information from the various balks will be recorded. The method for recording this information will be demonstrated in the field.

In addition to the ongoing documentation during the dig at the end of every day, the supervisors summarize the finds in a daily diary. At the end of the season they summarize the finds from the different seasons. This and all the other documentation serve as the basis of the full report that is eventually published.

Besides the graphic and textual documentation mentioned above, we also try to photograph the ongoing excavation and its finds. To prepare for photography (both *ad hoc* photography and that done by the professional photographer who will come once in awhile and at the end of the season), we will have to thoroughly clean the areas with brushes. Also, on a regular basis, our architect/draughtsman (J Rosenberg) will come to the dig to make accurate plans of the architectural finds in the excavation.

At the end of the day, all the finds are taken back to the field office at the kibbutz. Buckets of pottery (with their tags!) are filled with water, to be soaked overnight so that the pottery can be easily cleaned the next day. Other finds are brought to the office where they will be processed by the office registrars and their staff during the day.

When washing pottery several points are important. Do not mix between pottery from different baskets/buckets. If you do, the day's work goes down the drain! Also make sure that before you start scrubbing a piece of pottery with the brush, dip the sherd in clean water to see whether there is an inscription on the sherd. Otherwise, if it of ink, you could erase the inscription! After carefully and thoroughly cleaning the sherd, dip it in clean water and place it on a special tray in which all the sherds from the same basket will dry. Once again, do not mix between the sherds from different baskets. Also, make sure that you attach the tag that was on the basket to the tray on which the pottery is drying. Finally, pottery washing is a team effort – please help out with the washing until all is finished!

While we are working in the field, the registrar is busy arranging and registering the finds. All finds are marked, boxed and catalogued, according to the find types (pottery, bone, stone, etc.). All pottery is marked with indelible markers. Those that will stay at the kibbutz during the days will help in this effort.

After the pottery has been washed, it is allowed to dry for a day. Then, during the afternoon, the staff “reads” the pottery. The type, date and classification of the pottery from the various baskets and loci are defined. This is important, since this gives us preliminary information on the dates and activities relating to the various loci and helps us decide how to continue the work and understand the stratigraphy in the various areas of excavation. Team members are invited to watch the pottery reading from their excavation areas.

Various Types of Finds and Contexts:

There are various types of finds and contexts in the excavation. In many cases, the different types of contexts and finds require different excavation and care.

Architecture: During the Bronze and Iron Ages, most of the architecture in the Levant was made of sun-dried mudbrick placed on stone foundations. Sun-dried mudbrick is often hard to distinguish and one must scrape and brush carefully to notice them. This will be demonstrated repeatedly during the excavation. Mudbricks can be found standing *in situ* (in their original position) or in collapsed state. Walls themselves are most often built within a foundation trench which is dug into an earlier level.

Floors/Surfaces: The floors and ancient surfaces in early times could easily be comprised of packed dirt. Thus, it is not always easy to see and define a surface. At times, we unfortunately miss them and only realize this when they are seen in the section! It is thus important to excavate carefully and notice changes in the color, matrix and consistency of the deposits and in the type of finds. Floors often have various finds and installations on them (such as an oven [*tabun*]). Most often when we reach a floor or surface, the area supervisor will ask to start sifting the deposits.

Pottery: Broken pottery sherds are the most common find in the excavation. They are of extreme importance since they enable us to accurately date a context, and understand its stratigraphic nature and its original function. At times, even a very small fragment can be instructive. Thus, it is imperative to collect all pottery that is found within the soil deposits that you are excavating. Although during the excavation these fragments are often quite non-descript, after washing they can tell interesting

stories. During the pottery reading, the pottery is identified and important types are kept. In some cases (especially from mixed levels and un-identifiable fragments) the pottery is eventually discarded. In many cases the sherds are kept, and later restored in the lab, reconstructing the entire vessel in its original form (similar to a puzzle)..

Small Finds: This is the broad definition for all types of finds that are not architectural or pottery. This includes bones (human or animal), worked stone, metal, beads, glass, seals, etc. Each find will receive a separate basket number. At times, such finds are quite small and care must be taken that they are not lost as we are moving earth. This is the reason that at times we sift some of the deposits. Burnt organic remains are of importance since they tell us about the environmental conditions in antiquity and can be used for dating purposes (Carbon 14 dating). Carbonized organic remains must be collected carefully so that they are not contaminated (this will be demonstrated in the field). Please notify the supervisor if you find small black specks or pieces.

Inscriptions: Yes, please do find them! We have already found some inscriptions and we would love to have more. They can be on pottery, stone or other media and can be incised, written in ink, etc.

Pits/Disturbances: Often, pits and other disturbances are dug from a later level into an earlier one. The pit/disturbance can “mess-up” the portion of the earlier level that it reaches, moving around the finds that were originally there, and in some cases, putting later finds in earlier, lower levels. It is thus important to try to notice and define such features, otherwise we can mix between earlier and later deposits. Examples of this can be garbage or storage pits, foundation trenches for walls, “robber” trenches in which later people dig down to earlier levels to take out stones, animal holes, military trenches, tombs, etc. If we can define such a feature, it is important to excavate it separately, so as not to mix finds from earlier and later periods.

Destruction Levels: Archaeologists love digging destruction levels! These are levels that were destroyed in a sudden calamity, such as a fire, a violent conquest, etc. In such cases, the in situ finds are often well-preserved since the inhabitants did not have sufficient time to remove their valuables. In the excavations at Tell es-Safi/Gath we have been fortunate to excavate several such levels with hundreds of extremely well-preserved finds.

The Summer Field School

Some of the non-Israeli participants are registered for academic credit through Bar-Ilan University. These students participate in all lectures and field trips, and are required to write a report/research paper in order to receive academic credit. Participants in the field school are requested to speak to Aren Maeir for further instructions.

Archaeological Science Team

An integral part of the team working on the tell is team of archaeological scientists (and related field school for students of archaeological science) who will be working on site during the first 3 weeks of the excavation. As part of the joint Bar-Ilan University/Weizmann Institute of Science program in archaeological science a team of archaeological scientists covering a broad range of scientific fields will be working with us, hand in hand, in the excavation. As you will see, the archaeological science team works in the field with portable laboratory equipment, and also has a lab back at the kibbutz. This team will be working both on its own “projects” within the

excavations, as well as conducting ongoing analyses of finds and features that are discovered by other team members. One of the aims of the project is to fully integrate the “field archaeology” with archaeological science so as to improve our understanding of the past. During the season, the archaeological science team members will explain to the other team members what they are doing, both in the field and in lectures in the evenings.

Bottom Line

All told, the process of excavation is not an impossible thing to learn. If you combine what is written here with the instructions from your supervisor, along with the experience that you will gain as you are working, AND some healthy common sense, you will soon see that you can become proficient and quite qualified at field archaeology. Most important – keep your eyes open to the various finds and the subtle changes as you work and don’t be afraid to ask, comment or make suggestions. We hope you have a fruitful, enlightening, and interesting season with many exciting and exhilarating discoveries.

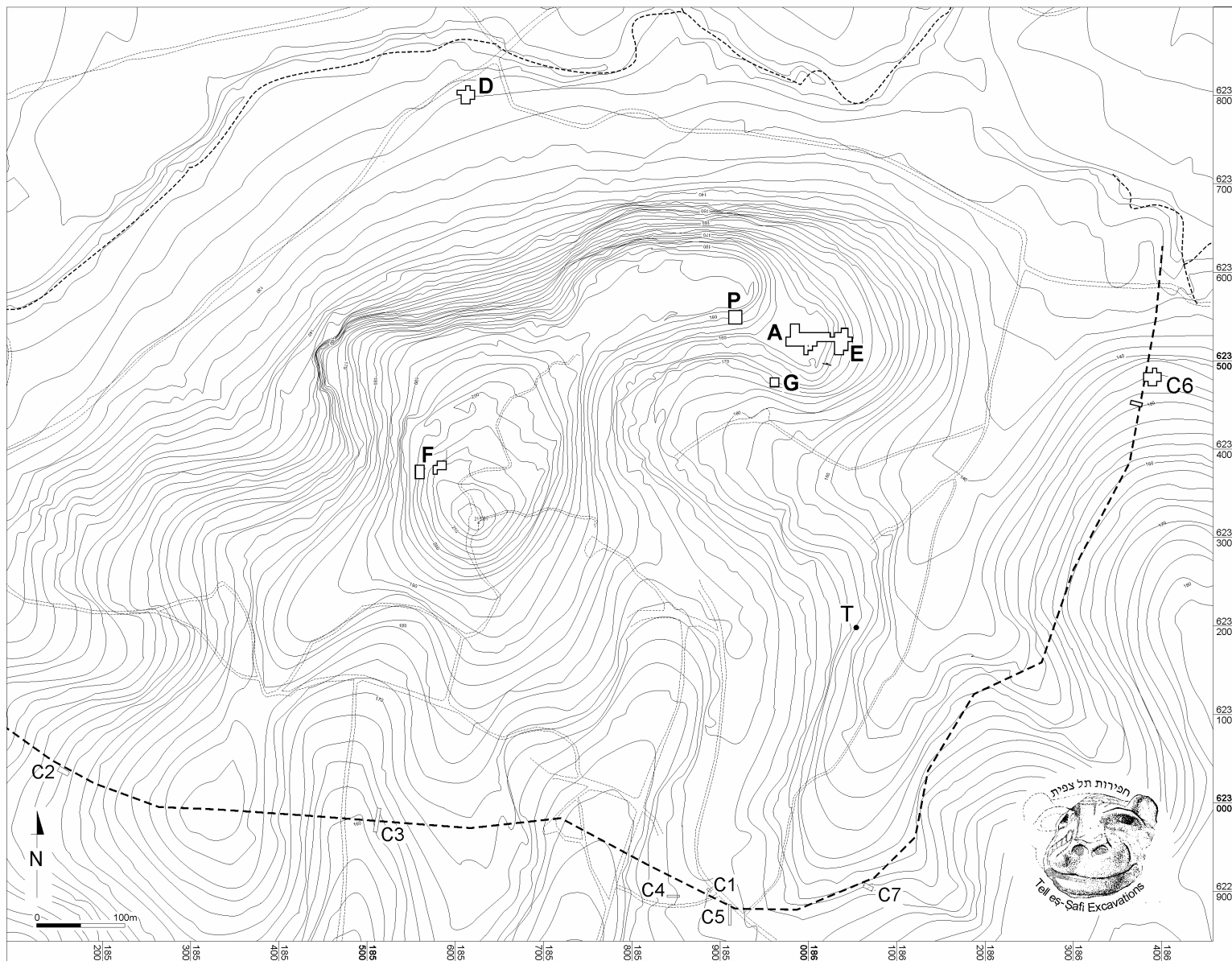
Good luck and enjoy!!



Period (date)	Area A		Area E		Area C6		Area F		Area D		Comments
Modern	A1	Burials, trenching	E1	Architecture	-	Surface finds	F1 Upper	Burials	D1	Surface finds	
Crusader	-	-	-	-	-	-	F2 Upper	Burials, walls			<i>Blanche Garde Castle</i>
Persian	-	-	-	-	-	-	F3 Upper	Surfaces			British Favissa (cultic deposit)
Iron IIB (8 th cent)	A2	Extensive evidence	-	-	-	-	F4 Upper	Domestic			Two levels: Sargon II? Sennacherib?
Iron IIA (9 th cent)	A3	Extensive evidence	E2	Sparse evidence	C1 C2	Siege system Pre-Siege system building	F5 upper	Domestic level; Bone tool facility	D2	Domestic; city wall?	Hazael Siege and Destruction
Iron IIA (10 th -9 th cent)	A4	Extensive evidence		-	-	-	-	-			Archaic Semitic Inscription
Iron IB (11 th -10 th cent)	A5	Extensive evidence	-	-	-	-	-	-			
Iron IA (12 th -11 th cent)	A6	Not yet extensively excavated	E3	Architecture, pits, installations	?	Cultic Building?	"F1" Lower	Domestic Level (Myc IIIC)			Various phases of early Iron I Philistine (including Myc IIIC)
LB III (13 th cent)	-	-	E4	Architecture "Patrician House"	?	Sherds, possible architecture	"F2" Lower	Domestic Level			Canaanite city; several phases; Egyptian inscriptions
MB II	-	-	-	-	-	-	"F3" Lower	Wall and glacis			Limited to upper tell
EBIV/MBI	-	-	-	-	C3	Burial?	-	-			
Late EB III	-	-	E5	Domestic Architecture	-	Bedrock	?	Possible fortifications			Similar to Yarmut
EB II-III	-	-	E6	Domestic Architecture	-	-	?	-			-

Tell es-Safi/Gath – General Stratigraphy

General Plan of Tell es-Safi/Gath



Tell es-Safi/Gath Excavations 2010 Season Field School - Plan of Lectures and Field Trips

Note: All Tours and Lectures are in English unless noted; Schedule subject to change

Week 1 (4-9/7)						
Day	Date	Time	Tour	Time	Lecture	Comments
Sun.	4/7		15:00 Tour of Tell es-Safi/Gath for new participants and getting to know excavation areas (A. Maeir and Area Supervisors)	12:00 20:00	A. Maeir: Introductory talk for BIU students (in Hebrew עברית) A. Maeir: The Excavations at Tell es-Safi/Gath: Intro lecture	
Mon.	5/7			17:00 17:00 20:00	I. Shai: Registration & Excavation Procedures (in Hebrew עברית); J. Chadwick: Stratigraphy, Registration & Excavation Procedures; S. Weiner, E. Boaretto, E. Weiss: Science and Archaeology	
Tues.	6/7	18:00	Tour of "Philistine Street" at Revadim (A. Maeir)	20:00	M. Brettler (Brandeis): Did David Really Kill Goliath of Gath?	
Wed.	7/7			20:00 20:00	M. Faerman (HU): Physical Anthropology in Archaeological Excavations D. Cassuto: Archaeological evidence of ancient weaving (in Hebrew עברית)	
Thurs.	8/7			20:00	End-of-week Dinner	

Tell es-Safi/Gath Excavations 2010 Season Field School - Plan of Lectures and Field Trips

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Week 2 (11-16/7)						
Day	Date	Time	Tour	Time	Lecture	Comments
Sun.	11/7			12:00 20:00	A. Maeir: Introductory talk for BIU students (in Hebrew עברית) A. Maeir: The Philistines and other Sea Peoples	
Mon.	12/7	6:00 16:00	Tour of Tell es-Safi/Gath for new participants (A. Maeir) Kh. Etri (A. Dagan/S. Yogev)	17:00 20:00	J. Uziel: Registration & Excavation Procedures (in Hebrew עברית) Alex Zukerman: The pottery of Tell es-Safi/Gath	
Tues.	13/7			20:00 20:00	L. Hitchcock: Ancient Cyprus - Architecture and Culture I. Shai: The Tel Burna Excavations (in Hebrew עברית)	
Wed.	14/7			20:00	L. Horwitz: Zooarchaeology	
Thurs.	15/7			20:00	End-of-week Dinner	BIU Field School: First papers due

Tell es-Safi/Gath Excavations 2010 Season Field School - Plan of Lectures and Field Trips

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Week 3 (18-23/7)						
Day	Date	Time	Tour	Time	Lecture	Comments
Sun.	18/7	16:00	Tour of Kh. Qeiyafeh (Y. Garfinkel, HU)	12:00 20:00	A. Maeir: Introductory talk for BIU students (in Hebrew עברית) A. Maeir:: The Excavations at Tell es-Safi/Gath - Intro lecture	
Mon.	19/7	6:00	Tour of Tell es-Safi/Gath for new participants (A. Maeir)	17:00 17:00 20:00	J. Uziel: Registration & Excavation Procedures (in Hebrew עברית) D. Cassuto: Registration & Excavation Procedures B. Davis: Aegean writing systems and the Philistines	Tisha be-Av (9 th of Av fast) - begins nightfall
Tues.	20/7			20:00	E. Marcus (Univ. of Haifa): Maritime Archaeology in the Levant	Tisha be-Av (9 th of Av fast) – optional; dig continues for non-fasters
Wed.	21/7			20:00 20:00	D. Master (Wheaton): Excavations at Tel Ashkelon A. Dagan: The Kfar Menahem site (in Hebrew עברית)	
Thurs.	22/7			20:00	End-of-week Dinner	

Tell es-Safi/Gath Excavations 2010 Season Field School - Plan of Lectures and Field Trips

Note: All Tours and Lectures are in English unless noted; Schedule subject to change

Week 4 (25-30/7)						
Day	Date	Time	Tour	Time	Lecture	Comments
Sun.	25/7			12:00	A. Maeir: Introductory talk for BIU students (in Hebrew עברית)	
				20:00	J. Uziel: The Middle Bronze Age in the Levant	
Mon.	26/7			17:00	I. Shai: Registration & Excavation Procedures (in Hebrew עברית)	
				20:00	J. Chadwick: The Archaeology of Bronze and Iron Age Jerusalem	
Tues.	27/7			20:00	A. Mazar (HU): Tel Rehov and the Land of Milk and Honey	
Wed.	28/7	16:00	Exploration of caves (A. Dagan)	20:00	I. Shai: Survey and Excavations at Tel Burna	
				20:00	A. Zukerman: Philistine pottery (in Hebrew עברית)	
Thurs.	29/7	9:00		20:00	End-of-season Party	BIU Field School: Second papers due